

MOJAVE DESERT
AIR QUALITY MANAGEMENT DISTRICT

Federal Operating Permit Number: 008800567

For: Naval Air Weapons Station, China Lake

Facility: Naval Air Weapons Station, China Lake

Issued Pursuant to MDAQMD Regulation XII
Effective Date: August 26, 2004

This Federal Operating Permit Expires
On: August 26, 2009

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PART I INTRODUCTORY INFORMATION

A. FACILITY IDENTIFYING INFORMATION:

<u>Owner/Company Name:</u>	Naval Air Weapons Station, China Lake
<u>Owner Mailing Address:</u>	Department Of The Navy Commanding Officer (Code N45NCW) 429 E. Bowen Rd, Stop 4014 China Lake, CA 93555-6108
<u>Facility Name:</u>	Naval Air Weapons Station, China Lake
<u>Facility Location:</u>	China Lake, California
<u>Mailing Address:</u>	Commanding Officer (Code N45NCW) 429 E. Bowen Rd, Stop 4014 China Lake, CA 93555-6108
<u>MDAQMD Federal Operating Permit Number:</u>	008800567
<u>MDAQMD Company Number:</u>	0088
<u>MDAQMD Facility Number:</u>	00567
<u>Responsible Official:</u>	M.G. STORCH, Capt USN
<u>Title:</u>	Commanding Officer
<u>Phone Number:</u>	760-939-2211
<u>Facility "Site" Contacts:</u>	Brenda Abernathy
<u>Phone Number:</u>	760-939-3230
<u>Facility "Off Site" Contacts:</u>	M.G. STORCH, Capt USN
<u>Phone Number:</u>	760-939-2211
<u>Nature of Business:</u>	Research, development, test, and evaluation of aircraft warfare systems, aircraft weapons integration, and airborne electronic warfare systems.
<u>SIC Code:</u>	9711
<u>Facility Location:</u>	UTM (Km): various

B. DESCRIPTION OF FACILITY:

Federal Operating Permit (FOP number: 008800567) for Naval Air Weapons Station, China Lake, which is a United States Navy, research, development, test, and evaluation facility for: air warfare systems, aircraft weapons integration, and airborne electronic warfare systems. Its Facilities include the following: Abrasive Blasting, Boilers, Control Devices, Gasoline Dispensing Facilities, Grinding/Mixing Operations, Test Ranges, Ovens, Painting Operations, Internal Combustions Engines, Soil Remediation, Solvent Tanks, and Survivability Testing Operations.

C. EQUIPMENT DESCRIPTION:

1. Two Abrasive Blasters:

- a. MDAQMD Permit Number A002952, Lindsey, model 200, capable of a maximum throughput of 100 lb of abrasive media per hour, with a maximum operating schedule of 24 hours/day, 8760 hours/year, not connected to any control device.
- b. MDAQMD Permit Number A003153, Ervin Industries, maximum operating schedule of 24 hours/day, 8760 hours/year, connected to a Knockout box control device, Permit number C003154.

2. Four Natural Gas-Fired Boilers:

- a. MDAQMD Permit Number B001074; Boiler #14, Nebraska Boiler Model NS-B-35, containing a Coen, model 275-81 FYR-COMPAK burner. Unit has a maximum heat output of 23.8 MMBtu/hour, and provides steam for space and process heating. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- b. MDAQMD Permit Number B001075; Boiler #13, Hercules Power Equipment Company, Model NB-1100, containing a Todd Burner Company model D-15 burner. Unit has a maximum heat output of 18.8 MMBtu/hour, and provides steam for space and process heating. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- c. MDAQMD Permit Number B003315; Boiler #33, Ajax Boiler, Model SGX-3000. Unit has a maximum heat input of 2.1 MMBtu/hour, and provides steam for space heating. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- d. MDAQMD Permit Number B003316; Boiler #21, Ajax Boiler, Model SGX-2250.

Unit has a maximum heat input of 2.25 MMBtu/hour, and provides steam for space heating. Maximum operating schedule is 24 hours/day, 8760 hours/year.

3. Emission Control Devices

- a. MDAQMD Permit Number C002909, Scrubber System, which may include: settling/quench column, gas scrubber, caustic/water tank with treatment system, and gas retention system. (Specific equipment details subject to individual District-approved test plan). Used to control emissions from Test Stand CT-3, Permit Number B002908. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- b. MDAQMD Permit Number C003154, Knockout Box, 36" X 36" X 36", manufactured in-house, for particulate control. Unit is control device for abrasive blasting operations, Permit Number A003153. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- c. MDAQMD Permit Number C003157, Mikro Pulsaire, model 31855, Baghouse for particulate control from grinding operations, associated with Permits B003155, and B003156. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- d. MDAQMD Permit Number C003396, MicroTrap MTC 2000 CFM, Negative Air Machine air filtration device, for asbestos abatement in buildings. Rated at 2000 CFM, consisting of the following:
 - No 1 prefilter: 100% polyester, high loft pad
 - No 2 prefilter: Pleated polyester/cotton panel, with 90% efficiency for particles $>10\mu\text{m}$
 - HEPA filter, with 99.97% removal efficiency for all particles $\geq 0.3\mu\text{m}$.Maximum operating schedule is 24 hours/day, 8760 hours/year.
- e. MDAQMD Permit Number C003397, MicroTrap MTC 2000 CFM, Negative Air Machine air filtration device, for asbestos abatement in buildings. Rated at 2000 CFM, consisting of the following:
 - No 1 prefilter: 100% polyester, high loft pad
 - No 2 prefilter: Pleated polyester/cotton panel, with 90% efficiency for particles $>10\mu\text{m}$
 - HEPA filter, with 99.97% removal efficiency for all particles $\geq 0.3\mu\text{m}$.Maximum operating schedule is 24 hours/day, 8760 hours/year
- f. MDAQMD Permit Number C003398, Aero Clean "E COND", Portable Negative

Air Machine, air filtration device, for asbestos abatement in buildings, consisting of the following:

- No 1 prefilter: 100% polyester, high loft pad
 - No 2 prefilter: Pleated polyester/cotton panel, with 90% efficiency for particles $>10\mu\text{m}$
 - HEPA filter, with 99.97% removal efficiency for all particles $\geq 0.3\mu\text{m}$.
- Maximum operating schedule is 24 hours/day, 8760 hours/year

g. MDAQMD Permit Number C004010, Mikro Pulsaire, model 20-6, Baghouse for particulate control from grinding operations, associated with Permits B003155, and B003156. Maximum operating schedule is 24 hours/day, 8760 hours/year.

h. MDAQMD Permit Number C004376, Gas Scrubber, consisting of;

- Vertical quench chamber
- Venturi Rod Scrubber, with 10,000 gallon recycle vessel
- Venturi Sorber Scrubbers (two) each with 5,000 gallon recycle vessels
- Deep bed filtration system
- Caustic mixing and storage tank

Maximum operating schedule is 24 hours/day, 8760 hours/year

4. Three above-ground Non-Retail Gasoline Facilities

a. MDAQMD Permit Number N001503, Gasoline Storage and Dispensing Facility, consisting of; an EnviroVault tank, 2,000 gallon capacity, rectangular 6' X 6', unknown model number, with Balance, Phase I and Phase II Vapor Recovery. Maximum operating schedule is 24 hours/day, 8760 hours/year.

b. MDAQMD Permit Number N003062, Gasoline Storage and Dispensing Facility, consisting of; unknown manufacturer, model number, unknown dimensions, 2000 gallon capacity, with Balance, Phase I, and Phase II Vapor Recovery. Maximum operating schedule is 24 hours/day, 8760 hours/year.

c. MDAQMD Permit Number N003570, Gasoline Storage and Dispensing Facility, consisting of; unknown manufacturer, model numbers, 17' long X 7.9' diameter, 6,000 gallon capacity, with Balance, Phase I, and Phase II Vapor Recovery. Maximum operating schedule is 24 hours/day, 8760 hours/year.

5. Four Grinding and one Mixing Operations conducted to produce small batches of propellants or explosives.

- a. MDAQMD Permit Number B003141, Grinding System, consisting of a 5 hp electrical drive, 0.25 hp feed screw, 100 pound capacity grinder, and 50 pound capacity mill. Grinder is a Micropulverizer, Model Type ISH. Mill is a Trost, model TX-2147. Batch operating time for Grinder is approximately 3 hours, and batch operating time for the mill, is approximately 1 hour. Units are operated in a closed, sealed room.
- b. MDAQMD Permit Number B003145, Mill, for grinding explosives or other materials, with phenolic beads [please note; using phenolic beads to grind materials], using ethyl alcohol/water mixture as lubricant:
 - Mill No1, 20-gallon capacity, driven by a 5 hp motor, manufactured by Sweco, model M45RC.
 - Mill No 2, 5-gallon capacity, driven by a 0.25 hp motor, manufactured by Sweco, model M-785.
 - Mill No 3, 1-gallon capacity, driven by a 0.25 hp motor, manufactured by Sweco, model M-185.

Emissions are controlled through the use of tightly fitting covers. Solvents are recovered by placing materials in drums, and collecting them per District Permit B003143. Maximum operating schedule is 24 hours/day, 8760 hours/year.

- c. MDAQMD Permit Number B003155, Hammer Mill, for grinding ammonium perchlorate, and other materials. Consists of a 500 pound capacity Hammer Mill, including; a 25 hp drive, 6 hp feed hoist, 3 hp feeder, and 0.5 hp feed screw. Manufactured by Raymond, model number 64059. Batch operating time is approximately 1 hour. Equipment vents to emission control device, Permit number C003157 or C004010. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- d. MDAQMD Permit Number B003156, Fluid Energy Mill, for grinding ammonium perchlorate, and other materials. Mill is 400-pound capacity, and includes, two 0.25 hp motors. Manufactured by Aljet, model 8 Micro Jet. Maximum feed rate is 100 lb/hour. Batch operating time is approximately 8 hours. Emissions are controlled by Baghouse Permit Number C003157 or C004010. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- e. MDAQMD Permit Number B003146, Mixer, for mixing explosives, propellants, or inert simulate formulations. Mixer is 150-gallon capacity, driven by a 50 hp motor. Manufactured by Baker Perkins, model 52149. Maximum process rate is 150 gallons per batch. Maximum operating schedule is 24 hours/day, 8760 hours/year.

6. Ordnance Test and Evaluation Operations, including:

-Nine (9) Rocket Motor Test Facilities, used for the static test firing of rocket motors

-Three (3) Ordnance Test Areas, used primarily to conduct insensitive munitions tests. Testing includes exposing components to fire, heat, and impact.

-Aeroheat Test Facility (T-Range), used to simulate variable aerodynamic heating to characterize and test materials of interest.

-Contained Burn Test Chamber, used for research, and testing of potential rocket motor demilitarization technologies. Scrubber is utilized for emissions control.

- a. MDAQMD Permit Number B001065, Skytop Bay I, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- b. MDAQMD Permit Number B001066, Skytop Bay IA, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year
- c. MDAQMD Permit Number B001067, Skytop Bay II, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- d. MDAQMD Permit Number B001068, Skytop Bay IIA, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- e. MDAQMD Permit Number B001069, Skytop Bay III, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- f. MDAQMD Permit Number B001070, Skytop Bay IV, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- g. MDAQMD Permit Number B001071, Skytop Bay VI, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum

operating schedule is 24 hours/day, 8760 hours/year.

- h. MDAQMD Permit Number B001072, Skytop Bay VII, Rocket Motor Test Stand. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - i. MDAQMD Permit Number B003132, Aeroheat Test Facility. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - j. MDAQMD Permit Number B004091, Plume Measurement Facility Test Stand, Skytop Bay VIII. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - k. MDAQMD Permit Number B004375, Contained Burn Test Chamber, MCBAT Test Stand. Manufacturer not applicable. Emission control device is a Scrubber System, Permit C004376. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - l. MDAQMD Permit Number I001063, Ordnance Testing, CT-4 Test area. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year
 - m. MDAQMD Permit Number I001064, Ordnance Testing, CT-6 Test area. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year
 - n. MDAQMD Permit Number I003131, Ordnance Testing, CT-1 Test area. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year
7. Miscellaneous Tests and Evaluation Operations
- CT-3 Test Range is used primarily for research and development of new technologies for the demilitarization of munitions.
 - The Fire Deck Research and Test Facility is used for conducting research into fire characterization, and the RDT&E of fire extinguishing materials, equipment, and techniques.

- a. MDAQMD Permit Number B002908, Test Stand, CT-3. Manufacturer not applicable. Emission controls may include the use of Scrubbing System, Permit C002909. Maximum operating schedule is 24 hours/day, 8760 hours/year
 - b. MDAQMD Permit Number B005156, Fire Deck Research and Test Facility. Equipment includes; Concrete Pad with drainage system, fuel storage tank, piping system, and fuel/water management system. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
8. Eleven (11) ovens for the drying and curing of experimental propellants, explosives, and simulate formulations; Ten ovens are steam heated, one is electrically heated.
- a. MDAQMD Permit Number B003139, 12' X 10' X 10' oven, steam heated to 200 °F at atmospheric pressure. Manufacturer not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - b. MDAQMD Permit Number B003140, 4' X 4' X 6' oven, steam heated to 200 °F at atmospheric pressure. Manufactured by Haskris, no model number. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - c. MDAQMD Permit Number B003142, 4' X 18' X 6' oven, steam heated to 180 °F at atmospheric pressure. Manufacturer not applicable, custom built into building. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - d. MDAQMD Permit Number B003143, 17' X 12' X 8' oven, steam heated to 210 °F at atmospheric pressure. Manufacturer not applicable, custom built into building. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - e. MDAQMD Permit Number B003144, 17' X 12' X 8' oven, steam heated to 210 °F at atmospheric pressure. Manufacturer not applicable, custom built into building. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - f. MDAQMD Permit Number B003147, 10' X 9' X 9' oven, steam heated to 240 °F at atmospheric pressure. Manufacturer, Moore and Hanks, no model number. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760

hours/year.

- g. MDAQMD Permit Number B003148, 5' X 5' X 5' oven, 30kW electrical heater, maximum temperature 290F at atmospheric pressure. Manufacturer, Greive Corporation, model HC-500. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - h. MDAQMD Permit Number B003159, 3.5' X 8' X 4.5' oven, steam heated to 230 °F at atmospheric pressure. Custom manufactured, Model number not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - i. MDAQMD Permit Number B003160, 6" Diameter 30' Deep casting pit (oven), steam heated to 140 °F at 5mm mercury pressure. Manufactured in 1958 by Los Angeles Boiler Works, Model number not applicable. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - j. MDAQMD Permit Number B003161, 20' X 10' X 12' oven, steam heated to a maximum temperature of 250 °F at atmospheric pressure. Manufacturer, Spray Booth Systems, model S-2181. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - k. MDAQMD Permit Number B003162, 18' X 18' X 11' oven, steam heated to a maximum temperature of 220°F at atmospheric pressure. Manufacturer, Tenney Engineering, model VIT. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
9. Eight (8) permitted painting operation systems; four are enclosed paint spray booths and two are High Volume Low Pressure (HVLP) Spray guns.
- a. MDAQMD Permit Number P005142, HVLP Paint Spray Gun. Manufacturer, SATA, model Mini-Jet NR/HVLP. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - b. MDAQMD Permit Number P008346, HVLP Paint Spray Gun. Manufacturer, DeVilbis, model OMX-510. Emission control devices are not used. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - c. MDAQMD Permit Number S002204, Paint Spray booth measuring 16' X 18' X 34'

- high. Manufacturer, JBI, model OWIT-30-DT. Emission control consists of 60 inlet and 60 outlet filters, each 20" square and 1" thick; unit operates at a pressure drop of 0.5 to 2.0 inches water column. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- d. MDAQMD Permit Number S003135, Paint Spray booth measuring 9.5' X 11' X 8'. Manufacturer, Binks, model number unknown. Emission control consists of double layer; 4 inch pleated paper filters and operates at a pressure drop of 0.5 to 1.0 inches water column. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - e. MDAQMD Permit Number S003138, Paint Spray booth measuring 19' X 25' X 12'. Unit was custom built; there is no model number. Emission control consists of 36 filters at 19.5" X 19.5" X 1.75" and 8 filters at 20" X 24" X 2" and operates at a pressure drop of 0.5 to 1.0 inches water column. Maximum operating schedule is 24 hours/day, 8760 hours/year.
 - f. MDAQMD Permit Number S007809, Paint Spray booth measuring 16' X 16' X 45'. Manufacturer, Col-Met, model TCC45PDT with AMU. Emission control consists of a single bank of 20" X 20" X 1" filters, and triple exhaust filters. Maximum operating schedule is 24 hours/day, 8760 hours/year.
10. Sixty-Seven internal combustion engines (ICE) used for a range of purposes. The majority are portable electrical generator sets used in remote portions of the facility to provide electrical power during tests; five (5) ICE's drive water pumps utilized during certain rocket motor tests, four (4) units are emergency electrical generators, two (2) drive stationary hydraulic winches; one (1) ICE is used as an emergency firefighting pump for an Aqueous Film Forming Foam (AFFF) system, and five (5) are emergency firefighting water pumps.
- a. MDAQMD Permit Number B003435, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-223, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
 - b. MDAQMD Permit Number B003436, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-224, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.

- c. MDAQMD Permit Number B003437, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-225, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- d. MDAQMD Permit Number B003438, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-276, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- e. MDAQMD Permit Number B003439, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-277, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- f. MDAQMD Permit Number B003440, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-278, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- g. MDAQMD Permit Number B003443, Electrical Generator, Engine Manufacturer Cummins, diesel, model 4BT-3.9-G2, Navy ID # K-281, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- h. MDAQMD Permit Number B003445, Electrical Generator, Engine Manufacturer Caterpillar, diesel, model D333, Navy ID # K-212, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- i. MDAQMD Permit Number B003448, Electrical Generator, Engine Manufacturer Allis-Chalmers, Diesel, model 3500, Navy ID # K-33, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 6.0 gallons/hr, 120 bhp, without emission control devices.
- j. MDAQMD Permit Number B003451, Electrical Generator, Engine Manufacturer Detroit Diesel, model 4913, Navy ID # K-206, 4 cylinder, four cycle, naturally aspirated, maximum fuel consumption 6.7 gallons/hr, 134 bhp, without emission

control devices.

- k. MDAQMD Permit Number B003452, Electrical Generator, Engine Manufacturer Detroit Diesel, model 4913, Navy ID # K-211, 4 cylinder, four cycle, naturally aspirated, maximum fuel consumption 6.7 gallons/hr, 134 bhp, without emission control devices.
- l. MDAQMD Permit Number B003454, Electrical Generator, Engine Manufacturer Detroit Diesel, model 4913, Navy ID # K-219, 4 cylinder, four cycle, naturally aspirated, maximum fuel consumption 6.7 gallons/hr, 134 bhp, without emission control devices.
- m. MDAQMD Permit Number B003455, Electrical Generator, Engine Manufacturer Detroit Diesel, model 4913, Navy ID # K-220, 4 cylinder, four cycle, naturally aspirated, maximum fuel consumption 6.7 gallons/hr, 134 bhp, without emission control devices.
- n. MDAQMD Permit Number B003456, Electrical Generator, Engine Manufacturer Detroit Diesel, model 4913, Navy ID # K-221, 4 cylinder, four cycle, naturally aspirated, maximum fuel consumption 6.7 gallons/hr, 134 bhp, without emission control devices.
- o. MDAQMD Permit Number B003458, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-51, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- p. MDAQMD Permit Number B003459, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-65, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- q. MDAQMD Permit Number B003460, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-66, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- r. MDAQMD Permit Number B003461, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-106, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission

control devices.

- s. MDAQMD Permit Number B003462, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-107, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- t. MDAQMD Permit Number B003463, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-108, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- u. MDAQMD Permit Number B003464, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-109, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- v. MDAQMD Permit Number B003465, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-138, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- w. MDAQMD Permit Number B003466, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-139, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- x. MDAQMD Permit Number B003467, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-140, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- y. MDAQMD Permit Number B003468, Electrical Generator, Engine Manufacturer Caterpillar, Diesel, model D333, Navy ID # K-141, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- z. MDAQMD Permit Number B003476, Electrical Generator, Engine Manufacturer Detroit Diesel, model 6711C24M, Navy ID # K-196, 6 cylinder, four cycle, naturally aspirated, maximum fuel consumption 10.3 gallons/hr, 205 bhp, without emission

control devices.

- aa. MDAQMD Permit Number B003477, Electrical Generator, Engine Manufacturer Caterpillar, Diesel model D333, Navy ID # K-213, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- ab. MDAQMD Permit Number B003478, Electrical Generator, Engine Manufacturer Caterpillar, Diesel model D333, Navy ID # K-214, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- ac. MDAQMD Permit Number B003630, Electrical Generator, Engine Manufacturer Caterpillar, Diesel model D333, Navy ID # K-215, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- ad. MDAQMD Permit Number B003908, Electrical Generator, Engine Manufacturer unknown, generator manufacturer is US Motors, 6 cylinder, 24 gallons/hr, 474 bhp, without emission control devices.
- ae. MDAQMD Permit Number B003920, Electrical Generator, Engine Manufacturer Caterpillar, Diesel model D333, Navy ID # K-253, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- af. MDAQMD Permit Number B003921, Electrical Generator, Engine Manufacturer Caterpillar, Diesel model D333, Navy ID # K-254, 6 cylinder, four cycle, turbocharged, maximum fuel consumption 8.5 gallons/hr, 170 bhp, without emission control devices.
- ag. MDAQMD Permit Number B003922, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-256, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- ah. MDAQMD Permit Number B003923, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-257, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.

- ai. MDAQMD Permit Number B003924, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-258, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- aj. MDAQMD Permit Number B003925, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-259, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- ak. MDAQMD Permit Number B003958, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-260, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- al. MDAQMD Permit Number B003971, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-263, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- am. MDAQMD Permit Number B003972, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-264, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- an. MDAQMD Permit Number B003973, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-265, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- ao. MDAQMD Permit Number B003974, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, Navy ID # K-266, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- ap. MDAQMD Permit Number B004426, Electrical Generator, Engine Manufacturer Detroit Diesel, model 8063-7416, 6 cylinder, timing four degrees retarded, turbocharged, aftercooled, maximum fuel consumption 24 gallons/hr, 474 bhp, without emission control devices.

- aq. MDAQMD Permit Number B004898, Water Pump Driver, Engine Manufacturer Caterpillar, Diesel model 3516STD, 16 cylinder, four cycle, turbocharged, maximum fuel consumption 100 gallons/hr, 2000 bhp, without emission control devices.
- ar. MDAQMD Permit Number B004899, Water Pump Driver, Engine Manufacturer Caterpillar, Diesel model 3408, 8 cylinder, four cycle, turbocharged, maximum fuel consumption 23.2 gallons/hr, 393 bhp, without emission control devices.
- as. MDAQMD Permit Number B004900, Water Pump Driver, Engine Manufacturer Cummins, Diesel model VT-8-430IP, 8 cylinder, four cycle, turbocharged, maximum fuel consumption 21.5 gallons/hr, 430 bhp, without emission control devices.
- at. MDAQMD Permit Number B004901, Water Pump Driver, Engine Manufacturer Cummins, Diesel model HR61P, 6 cylinder, four cycle, naturally aspirated, maximum fuel consumption 6.5 gallons/hr, 130 bhp, without emission control devices.
- au. MDAQMD Permit Number B004902, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp, without emission control devices.
- av. MDAQMD Permit Number B004903, Electrical Generator, Engine Manufacturer Cummins, Diesel model 4BT-3.9-G2, 4 cylinder, four cycle, turbocharged, maximum fuel consumption 5.1 gallons/hr, 102 bhp.
- aw. MDAQMD Permit Number B004904, Compressor, Engine Manufacturer Caterpillar, Diesel, model number unknown, 8 cylinders, four cycle, Naturally Aspirated, maximum fuel consumption 13.6 gallons/hr, 254 bhp, without emission control devices.
- ax. MDAQMD Permit Number B004905, Water Pump Driver, Engine Manufacturer Cummins, Diesel, model NTT-1855-P, 8 cylinder, four cycle, Turbocharged, maximum fuel consumption 22.5 gallons/hr, 450 bhp, without emission control devices.
- ay. MDAQMD Permit Number B007673, Generator, Engine Manufacturer Allis-Chalmers, Diesel, model number unknown, 6 cylinder, unknown cycle, Turbocharged, maximum fuel consumption unknown, 150 bhp, without emission control devices.

- az. MDAQMD Permit Number B007946, Hydraulic Winch Driver, Engine Manufacturer Cummins, Diesel, model HRP, 6 cylinder, unknown cycle, aspiration unknown, maximum fuel consumption unknown, 160 bhp, without emission control devices.
- ba. MDAQMD Permit Number B007947, Hydraulic Winch Driver, Engine Manufacturer Cummins, Diesel, model HRP, 6 cylinder, unknown cycle, aspiration unknown, maximum fuel consumption unknown, 160 bhp, without emission control devices.
- bb. MDAQMD Permit Number B008075, Electric Generator, Engine Manufacturer Cummins, Diesel, model 6CTA8.3-G2, number of cylinders 6, four cycle, Turbocharged, Aftercooled, maximum fuel consumption 15 gal/hr, 252 bhp, without emission control devices.
- bc. MDAQMD Permit Number B008076, Electric Generator, Engine Manufacturer Cummins, Diesel, model 6CTA8.3-G2, number of cylinders 6, four cycle, Turbocharged, Aftercooled, maximum fuel consumption 15 gal/hr, 252 bhp, without emission control devices.
- bd. MDAQMD Permit Number B008077, Electric Generator, Engine Manufacturer Cummins, Diesel, model 6CTA8.3-G2, number of cylinders 6, four cycle, Turbocharged, Aftercooled, maximum fuel consumption 15 gal/hr, 252 bhp, without emission control devices.
- be. MDAQMD Permit Number B008078, Electric Generator, Engine Manufacturer Volvo, Diesel, model TWD123OVE, number of cylinders 6, four cycle, Turbocharged, Aftercooled, maximum fuel consumption 13.6 gal/hr, 343 bhp, without emission control devices.
- bf. MDAQMD Permit Number B008385; Electrical Generator; Engine manufacturer Cummins, Diesel, Model No. 6CTA8.3-G2, 6 cylinders, Direct Injected, Turbo Charged, 252bhp.
- bg. MDAQMD Permit Number B008386; Electrical Generator; Engine Manufacturer Cummins, Diesel, Generator, Model No. 6CTA8.3-G2, 6 cylinders, Direct Injected, Turbo Charged, 252bhp.
- bh. MDAQMD Permit Number B008658; Generator, Diesel Fueled, Cummins, Model 6CTA8.3-G2, 6 cylinders, Direct Injected, Turbocharged, rated at 252 BHP
- bi. MDAQMD Permit Number E004897; Emergency Firefighting Pump; Engine

Manufacturer Chrysler, Gasoline, Model HT413810, 8 cylinders, 140 bhp.

- bj. MDAQMD Permit Number E007943, Emergency Electrical Generator, Engine
Manufacturer Caterpillar, Diesel, model 3208, number of cylinders 8, four cycle, 4
degrees retarded, aspiration unknown, maximum fuel consumption 11.7 gal/hr, 241
bhp, without emission control devices.
- bk. MDAQMD Permit Number E007944, Emergency Electrical Generator, Engine
Manufacturer Caterpillar, Diesel, model 3208, number of cylinders 8, four cycle, 4
degrees retarded, aspiration unknown, maximum fuel consumption 11.7 gal/hr, 241
bhp, without emission control devices.
- bl. MDAQMD Permit Number E007945, Emergency Firefighting Pump, Engine
Manufacturer Caterpillar, Diesel, model 3208, number of cylinders 8, four cycle,
aspiration unknown, maximum fuel consumption 11.7 gal/hr, 160 bhp, without
emission control devices.
- bm. MDAQMD Permit Number E007948, Emergency Firefighting Pump, Engine
Manufacturer Detroit Diesel, Diesel, model 50348312, number of cylinders 8, cycle
unknown, Turbocharged, maximum fuel consumption unknown, 202 bhp, without
emission control devices.
- bn. MDAQMD Permit Number E007949, Emergency Firefighting Pump, Engine
Manufacturer Cummins, Diesel, model V378F1, number of cylinders 6, cycle
unknown, aspiration unknown, maximum fuel consumption unknown, 111 bhp,
without emission control devices.
- bo. MDAQMD Permit Number E008521; Emergency Generator; Cummins, Diesel,
Generator, Model No. 6CT8.3-G2, 6 cylinders, Turbo Charged, 207bhp.
- bp. MDAQMD Permit Number E008555; Emergency Generator; Cummins, Diesel,
Model No. 6CTA8.3-G2, 6 cylinders, Direct Injected, Turbo Charged, 207bhp.
- bq. MDAQMD Permit Number M008656; Standby Generator, Diesel Fueled, Cummins,
Model 6CTA8.3-G2, 6 cylinders, Direct Injected, Turbocharged, rated at 252 BHP
- br. MDAQMD Permit Number M008657; Standby Generator, Diesel Fueled, Cummins,
Model 6CTA8.3-G2, 6 cylinders, Direct Injected, Turbocharged, rated at 252 BHP

11. Two (2) Soil Vapor Extraction and Treatment Systems.
 - a. MDAQMD Permit Number B003491, Soil Vapor Extraction and Treatment System, Manufactured by Evax Technologies. 250 SCFM thermal/catalytic oxidizer consisting of vacuum pump, with 7.5 hp electrical motor, knockout tank, with particulate filter, pressure relief valve, and level switch, thermal oxidizer, catalytic oxidizer, Heat Exchanger, and Control Panel. Burner manufactured by Eclipse Combustion, Model 84 MVTA, rated at 1 MM btu/hr.
 - b. MDAQMD Permit Number B003657, Soil Vapor Extraction and Treatment System, Manufactured by Paragon Environmental Systems, 250 SCFM thermal/catalytic oxidizer including valving, piping, and monitoring equipment.
12. Five (5) Solvent Dip Tanks
 - a. MDAQMD Permit Number T003150, 38" X 98.5" Tank with volume of 1170 gallons, solvent is Citrikleen or equivalent, used for soaking rocket motor cases and miscellaneous hardware to remove residual linings, carbon, propellants, and other materials; equipped with tight fitting cover.
 - b. MDAQMD Permit Number T003151, 38" X 98.5" Tank with volume of 1170 gallons, solvent is acetone, used for soaking rocket motor cases and miscellaneous hardware to remove residual linings, carbon, propellants, and other materials; equipped with tight fitting cover.
 - c. MDAQMD Permit Number T003152, 38" X 98.5" Tank with volume of 1170 gallons, solvent is paint thinner, used for soaking rocket motor cases and miscellaneous hardware to remove residual linings, carbon, propellants, and other materials; equipped with tight fitting cover.
 - d. MDAQMD Permit Number T005062, 45" X 24" X 17" Cold parts washer Tank, manufactured by R&D, model E440, solvent is acetone, used for soaking/cleaning of materials used for research and development; equipped with tight fitting cover.
 - e. MDAQMD Permit Number T005063, 45" X 24" X 17" Cold parts washer Tank, 80 gallon volume, manufactured by R&D, model E440, solvent is paint thinner or solvent with equivalent boiling point, used for soaking/cleaning of materials used for research and development; equipped with tight fitting cover.
12. Four (4) Survivability Testing Operations related Permits

- a. MDAQMD Permit Number B003133, Survivability Testing, High Velocity Airflow System (HIVAS) and 6 test pads, includes four Pratt & Whitney TF-33 turbofan engines; located at WSL Main Test Site.
- b. MDAQMD Permit Number B003277, Survivability Testing, WSL K-2 Range.
- c. MDAQMD Permit Number B004011, Survivability Testing, WSL Portable High Velocity Airflow System includes Portable Pratt & Whitney Gas Turbine model TF30P-6E, with a heat output of 139 MMBtu/hr
- d. MDAQMD Permit Number B007890, Survivability Testing, WSL P-407 Test Site, HIVAS and two test pads, includes nine Pratt & Whitney TF-33 turbofan engines.

PART II

FACILITYWIDE APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

A. REQUIREMENTS APPLICABLE TO ENTIRE FACILITY AND EQUIPMENT:

1. A permit is required to operate this facility.
[Rule 203 - *Permit to Operate*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
2. The equipment at this facility shall not be operated contrary to the conditions specified in the District permit to operate.
[Rule 203 - *Permit to Operate*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
3. The Air Pollution Control Officer may impose written conditions on any permit.
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
4. Commencing work or operation under a permit shall be deemed acceptance of all the conditions so specified.
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
5. Posting of the permit to operate is required on or near the equipment or as otherwise approved by the APCO/District.
[Rule 206 - *Posting of Permit to Operate*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
6. Owner/Operator shall not willfully deface, alter, forge or falsify any permit issued under District rules.
[Rule 207 - *Altering or Falsifying of Permit*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) and 52.220(c)(31)(vi)(C) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
7. Permits are not transferable.
[Rule 209 - *Transfer and Voiding of Permit*; Version in SIP = CARB Ex. Order G-73, 40

CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

8. The APCO may require the Owner/Operator to provide and maintain such facilities as are necessary for sampling and testing.
[Rule 217 - *Provision for Sampling And Testing Facilities*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(31)(vi)(C) - 02/01/77 43 FR 52237; Current Rule Version = 07/25/77]
9. The equipment at this facility shall not require a District permit or be listed on the Title V permit if such equipment is listed in Rule 219 and meets the applicable criteria contained in Rule 219 (B). However, any exempted insignificant activities/equipment are still subject to all applicable facility-wide requirements.
[SIP Pending: Rule 219 - *Equipment Not Requiring a Written Permit* as Amended 12/21/94; Prior version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237]
10. The Owner/Operator of this facility shall obtain a Federal Operating Permit for operation of this facility.
[Rule 221 - *Federal Operating Permit Requirement*; Version in SIP = Current, 40 CFR 52.220(c)(216)(i)(A)(2) - 02/05/96 61 FR 4217]
11. Owner/Operator shall pay all applicable MDAQMD permit fees.
[Rule 301 - *Permit Fees*; Applicable Version = 10/23/94, Applicable via Title V Program interim approval 02/05/96 61 FR 4217]
12. Owner/Operator shall pay all applicable MDAQMD Title V Permit fees.
[Rule 312 - *Fees for Federal Operating Permits*; Applicable Version = 10/23/94, Applicable via Title V Program interim approval 02/05/96 61 FR 4217]
13. Stack and point source visible emissions from this facility, of any air contaminant (including smoke) into the atmosphere, shall not equal or exceed Ringelmann No. 1 for a period or periods aggregating more than three minutes in any one hour:
 - a. While any unit is fired on Public Utilities Commission grade natural gas or propane, Periodic Monitoring for combustion equipment is not required to validate compliance with the Rule 401 Visible Emissions limit. However, the Owner/Operator shall comply with the recordkeeping requirements stipulated elsewhere in this permit regarding the logging of fuel type, amount and supplier's certification information.
 - b. While any unit is fired on diesel fuel, Periodic Monitoring, in addition to required recordkeeping, is required to validate compliance with Rule 401 Visible Emissions

limit as indicated below:

- i. Reciprocating engines equal to or greater than 1000 horsepower, firing on only diesel with no restrictions on operation: a visible emissions inspection is required every twelve (12) months or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 12 month time frame.
- ii. Diesel Standby and emergency reciprocating engines using California low sulfur fuels require no additional monitoring for opacity.
- iii. Diesel/Distillate-Fueled Boilers firing on California low sulfur fuels require a visible emissions inspection after every 1 million gallons diesel combusted, to be counted cumulatively over a 5-year period.
- iv. On any of the above, if a “visible emissions inspections” documents opacity, an EPA Method 9 “Visible Emissions Evaluation” shall be completed within 3 working days, or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3 working day time frame.

[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
[40 CFR 70.6 (a)(3)(i)(B) - *Periodic Monitoring Requirements*]

14. Owner/Operator is limited to use of the following quality fuels for fuel types specified elsewhere in this permit: Natural gas fuel - sulfur compounds shall not exceed 800 ppm calculated as hydrogen sulfide at standard conditions; diesel fuel - sulfur content shall not exceed 0.5 percent by weight. Compliance with Rule 431 fuel sulfur limits is assumed for PUC quality natural gas fuel and CARB certified diesel fuel. Records shall be kept on-site and available for review by qualified District, CARB or EPA personnel at any time. The sulfur content of non-CARB certified diesel fuel shall be determined by use of ASTM method D 2622-82, or (ASTM method D 2880-71, or equivalent).
[40 CFR 70.6 (a)(3)(i)(B) - *Periodic Monitoring Requirements*]
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
15. Emissions of fugitive dust from any transport, handling, construction or storage activity at this facility shall not be visible in the atmosphere beyond the property line of the facility.
[Rule 403 - *Fugitive Dust*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
16. Owner/Operator shall comply with Section (C)(3) of Rule 403.1 unless an “Alternative PM₁₀ Control Plan” (ACP) pursuant to Rule 403.1(G) has been approved. Construction/Demolition activities shall comply with a District approved Dust Control Plan. This rule only applies to the Trona Planning Area (formerly the Searles Valley

Planning Area) portion of the facility. Sections (C)(2), (C)(4) and (C)(5) do not apply to this facility.

NOTE: EPA replaced the SVPA with 3 separate areas based on county boundaries effective 5 Sep 2002. San Bernardino portion is Trona Planning Area. See 67 FR 50805 [SIP Pending: Rule 403.1 - *Fugitive Dust Control for the Searles Valley Planning Area* as amended 11/25/96 and SIP submitted 03/03/97]

17. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
18. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
19. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂), greater than or equal to 500 ppm by volume.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

20. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum of 15 consecutive minutes.
- (a) The provisions of this condition shall not apply to emissions from internal combustion engines.
- [Rule 407 - *Liquid and Gaseous Air Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
21. Owner/Operator shall not build, erect, install or use any equipment at this facility, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the Health and Safety Code or of District Rules.
- (a) This condition shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code, or of District Rule 402.
- [Rule 408 - *Circumvention*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
22. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes. (Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
- [Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
- Reference Section III A(1)
23. APCO in his/her discretion, may refrain from enforcement action against an Owner/Operator of any equipment which has violated a technology-based emission limitation, including but not limited to conditions contained in any permit issued by the District establishing such emission limitation, provided that a Breakdown has occurred and:
- (a) Any breakdown which results in emissions exceeding a technology-based emission limitation is reported to the District within one hour of such breakdown or within one hour of the time a person knew or reasonably should have known of the occurrence of such breakdown; and

- (b) An estimate of the repair time is provided to the District as soon as possible after the report of the breakdown; and
- (c) All reasonable steps are immediately taken to minimize the levels of emissions and to correct the condition leading to the excess emissions.
- (d) The equipment is operated only until the end of a cycle or twenty-four (24) hours, whichever is sooner, at which time it shall be shut down for repairs unless a petition for an emergency variance has been filed with the clerk of the Hearing Board in accordance with Regulation V.
- (e) If the breakdown occurs outside normal District working hours, the intent to file an emergency variance shall be transmitted to the District in a form and manner prescribed by the Air Pollution Control Officer.

[SIP Pending: Rule 430 - *Breakdown Provisions* as amended 12/21/94 and submitted 02/24/95]

24. The provisions of Regulation IV except Rule 402 shall not apply to experimental research operations when the following requirements are met:
- (a) the purpose of the operation is to permit investigation, experiment or research to advance the state of knowledge or the state of the art; and
 - (b) the APCO has given written prior approval which shall include limitation of time.

[SIP: Not SIP: Rule 441 – *Research Operations* Disapproved 1/16/81 and 40 CFR 52.272(a)(9)(i)]

25. Owner/Operator of this facility shall not discharge organic materials into the atmosphere from equipment in which organic solvents or materials containing organic solvents are used, unless such emissions have been reduced by at least 85% or to the following:
- (a) Organic materials that come into contact with flame or are baked, heat cured or heat polymerized, are limited to 1.4 kilograms (3.1 pounds) per hour not to exceed 6.5 kilograms (14.3 pounds) per day.
 - (b) Organic materials emitted into the atmosphere from the use of photo-chemically reactive solvents are limited to 3.6 kilograms (7.9 pounds) per hour, not to exceed 18 kilograms (39.6 pounds) per day, except as provided in Rule 442, subsection (a)(1). All organic materials emitted for a drying period of 12 hours following their application shall be included in this limit.
 - (c) Organic materials emitted into the atmosphere from the use of non-photo-chemically reactive solvents are limited to 36.8 kilograms (81 pounds) per hour not to exceed 272 kilograms (600 pounds) per day. All organic materials emitted for a drying period of 12 hours following their application shall be included in this limit.
 - (d) The provisions of this rule shall not apply to:
 - (1) The manufacture of organic solvents, or the transport or storage of organic solvents, or the transport or storage of materials containing organic solvents.

- (2) The use of equipment for which other requirements are specified by Rules 461, 462, 463, and 464 or which are exempt from air pollution control requirements by said rules.
- (3) The spraying or other employment of organic solvents as insecticides, pesticides or herbicides.
- (4) The use of water reducible materials, provided that:
 - (a) the volatile content of such material is not photo-chemically reactive and consists of at least 80 percent water by volume, and
 - (b) the organic solvent or any material containing organic solvent does not come into contact with flame.
- (5) The use of high solid materials, provided that:
 - (a) the volatile content of such material is not photochemically reactive and does not exceed 20 percent by volume of said material, and
 - (b) more than 50 percent by volume of such volatile material is evaporated before entering a chamber heated above ambient application temperature, and
 - (c) the organic solvent or any material containing organic solvent does not come into contact with flame.
- (6) The use of ultra high solid materials, provided that:
 - (a) the volatile content of such material is not photochemically reactive and does not exceed 5 percent by volume of said material, and
 - (b) the organic solvent or any material containing organic solvent does not come into contact with flame.
- (7) The use of equipment or materials for which other requirements are specified in source specific rules of Regulation XI after the compliance dates specified in such source specific rules.
- (8) The use of 1-1-1 Trichloroethane.

[MDAQMD Rule 442 – Usage of Solvents, Version in SIP = 2/20/79: Approved 6/9/82, 47 FR 25013, 40 CFR 52.220(c)(51)(xii)(B); Approved 9/8/78, 43 FR 40011, 40 CFR 52.220(c)(39)(ii)(C)]

- 26. Owner/Operator shall not set open outdoor fires unless in compliance with Rule 444. Outdoor fires burned according to an existing District permit are not considered “open outdoor fires” for the purposes of Rule 444 (reference Rule 444(B)(10)).
[Rule 444 – Open Outdoor Fires, Version in SIP = 11/25/96, 40 CFR 52.220(c)(42)(xiii)(A) and 40 CFR 52.273 (6)(12)(i)]
- 27. Owner/Operator of this facility shall comply with the Organic Solvent Degreasing Operations requirements of Rule 1104 when engaged in wipe cleaning, cold solvent

cleaning and/or vapor cleaning (degreasing) operations for metal/non-metal parts/products. These requirements are as follows:

- (a) All degreasers shall be equipped with a cover, which reduces solvent evaporation, except for remote reservoirs.
- (b) A permanent, conspicuous label summarizing the applicable operating requirements contained in Rule 1104. In lieu of a label, operating instructions may be posted near the degreaser where the operators can access the proper operating requirements of this rule.
- (c) Cold Solvent Degreasers - Freeboard Requirements:
 - (i) Cold solvent degreasers using only low volatility solvents, which are not agitated, shall operate with a freeboard height of not less than 6 inches.
 - (ii) Cold solvent degreasers using only low volatility solvents may operate with a freeboard ratio equal to or greater than 0.50 when the cold solvent degreaser has a cover, which remains closed during the cleaning operation.
 - (iii) Any cold solvent degreasers using solvent which is agitated, or heated above 50°C (120°F) shall operate with a freeboard ratio equal to or greater than 0.75.
 - (iv) A water cover may be used as an acceptable control method to meet the freeboard requirements, when the solvent is insoluble in water and has a specific gravity greater than one.
- (d) Cold Solvent Degreasers - Cover Requirements:
 - (i) Cold solvent degreasers using high volatility solvent shall have a cover that is a sliding, rolling or guillotine (bi-parting) type, which is designed to easily open and close without disturbing the vapor zone.
- (e) Cold Solvent Degreasers - Solvent Level Identification:
 - (ii) A permanent, conspicuous mark locating the maximum allowable solvent level conforming to the applicable freeboard requirements.
- (f) All Degreasers shall comply with the following operating requirements:
 - (i) Any solvent cleaning equipment and any emission control device shall be operated and maintained in strict accord with the recommendations of the manufacturer.
 - (ii) Degreasers shall not be operating with any detectable solvent leaks.
 - (iii) All solvent, including waste solvent and waste solvent residues, shall be stored in closed containers at all times. All containers for any solvent(s) shall have a label indicating the name of the solvent/material they contain.
 - (iv) Waste solvent and any residues shall be disposed of by one of the following methods: a commercial waste solvent reclamation service licensed by the State of California; **or** a federally or state licensed

facility to treat, store or dispose of such waste; **or** the originating facility may recycle the waste solvent and materials in conformance with requirements of Section 25143.2 of the California Health and Safety Code.

- (v) Degreasers shall be covered to prevent fugitive leaks of vapors, except when processing work or to perform maintenance.
 - (vi) Solvent carry-out shall be minimized by the following methods:
 - a) Rack workload arranged to promote complete drainage
 - b) Limit the vertical speed of the power hoist to 3.3 meters per minute (11 ft/min) or less when such a hoist is used.
 - c) Retain the workload inside of the vapor zone until condensation ceases.
 - d) Tip out any pools of solvent remaining on the cleaned parts before removing them from the degreaser if the degreasers are operated manually.
 - e) Do not remove parts from the degreaser until the parts are visually dry and not dripping/leaking solvent. (This does not apply to an emulsion cleaner workload that is rinsed with water within the degreaser immediately after cleaning.)
 - (vii) The cleaning of porous or absorbent materials such as cloth, leather, wood or rope is prohibited.
 - (viii) Except for sealed chamber degreasers, all solvent agitation shall be by either pump recirculation, a mixer, or ultrasonics.
 - (ix) The solvent spray system shall be used in a manner such that liquid solvent does not splash outside of the container. The solvent spray shall be a continuous stream, not atomized or shower type, unless, the spray is conducted in a totally enclosed space, separated from the environment.
 - (x) For those degreasers equipped with a water separator, no solvent shall be visually detectable in the water in the separator.
 - (xi) Wipe cleaning materials containing solvent shall be kept in closed containers at all times, except during use.
 - (xii) A degreaser shall be located so as to minimize drafts being directed across the cleaning equipment, the exposed solvent surface, or the top surface of the vapor blanket.
 - (xiii) A method for draining cleaned material, such as a drying rack suspended above the solvent and within the freeboard area, shall be used so that the drained solvent is returned to the degreaser or container.
- (g) Rule 442 Applicability: Any solvent using operation or facility which is not subject to

the source-specific Rule 1104 shall comply with the provisions of Rule 442. Any solvent using operation or facility which is exempt from all or a portion of the VOC limits, equipment limits or the operational limits of Rule 1104 shall be subject to the applicable provisions of Rule 442.

- (h) Solvent Usage Records. Owner/Operator subject to Rule 1104 or claiming any exemption under Rule 1104, Section (E), shall comply with the following requirements:
- (1) Maintain and have available during an inspection, a current list of solvents in use at the facility which provides all of the data necessary to evaluate compliance, including the following information separately for each degreaser, as applicable:
 - (i) product name(s) used in the degreaser, and
 - (ii) the mix ratio of solvent compounds mixtures of solvents are used, and
 - (iii) VOC content of solvent or mixture of compounds as used, and
 - (iv) the total volume of the solvent(s) used for the facility, on a monthly basis, and
 - (v) the name and total volume applied of wipe cleaning solvent(s) used, on a monthly basis.
 - (2) Additionally, for any degreaser utilizing an add-on emission control device/system as a means of complying with provisions of Rule 1104 shall, on a monthly basis, maintain records of key system operating and maintenance data. Such data is recorded for the purpose of demonstrating continuous compliance during periods of emission producing activities. The data shall be recorded in a manner as prescribed by the District.
 - (3) Documentation shall be maintained on site of the disposal or on site recycling of any waste solvent or residues.
 - (4) Records shall be retained (at facility) and available for inspection by qualified District, CARB or EPA personnel for the previous 5 year period as required by this Title V / Federal Operating Permit (Reference Rule 1203(D)(1)(d)(ii)).

[Rule 1104 - Organic Solvent Degreasing Operations; Version in SIP = 9/28/94, 40 CFR 52.220(c)(207)(i)(D)(2) - 04/30/96 61 FR 18962, effective 11/30/94]

28. Owner/Operator's use of *Architectural Coatings* at this facility shall comply with the requirements of Rule 1113, including the VOC limits specified in Rule 1113, Table 1, as listed below:

Table 1
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

Limits are expressed in grams of VOC per liter^a of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

Coating Category	Effective February 24, 2003	Effective May 24, 2003	Effective 1/1/2004
Flat Coatings	250	100	
Nonflat Coatings	250	150	
Nonflat-High Gloss Coatings	250		
Specialty Coatings			
Antenna Coatings		530	
Antifouling Coatings		400	
Bituminous Roof Coatings	300		
Bituminous Roof Primers	350 ^b	350	
Bond Breakers	350		
Clear Wood Coatings			
Clear Brushing Lacquers	680		
Lacquers (including lacque sanding sealers)	680	550	
Sanding Sealers (other than lacquer sanding sealers)	550	350	
Varnishes	350		
Concrete Curing Compounds	350		
Dry Fog Coatings	400		
Faux Finishing Coatings		350	
Fire Resistive Coatings		350	
Fire-Retardant Coatings:			
Clear	650		
Opaque	350		
Floor Coatings		250	
Flow Coatings		420	
Form-Release Compounds		250	
Graphic Arts Coatings (Sign Paints)	500		
High Temperature Coatings	550	420	
Industrial Maintenance Coatings	420 ^c		250
Low Solids Coatings ^d		120	
Magnesite Cement Coatings	600	450	
Mastic Texture Coatings	300		
Metallic Pigmented Coatings	500		

Coating Category	Effective February 24, 2003	Effective May 24, 2003	Effective 1/1/2004
Multi-Color Coatings	580	250	
Pre-Treatment Wash Primers	780	420	
Primers, Sealers, and Undercoaters	350	200	
Quick-Dry Enamels	400	250	
Quick-Dry Primers, Sealers, and Undercoaters	450	200	
Recycled Coatings		250	
Roof Coatings	300	250	
Rust Preventative Coatings		400	
Shellacs:			
Clear	730		
Opaque	550		
Specialty Primers, Sealers, and Undercoaters	350		
Stains	350	250	
Swimming Pool Coatings	650	340	
Swimming Pool Repair and Maintenance Coatings	650	340	
Temperature-Indicator Safety Coatings		550	
Traffic Marking Coatings	250	150	
Waterproofing Sealers	400	250	
Waterproofing Concrete/Masonry Sealers	400		
Wood Preservatives	350 ^e	350	

a. Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams VOC per liter.

b. Formerly listed as General Primer, Sealers & Undercoaters.

c. Except Anti-Graffiti coatings which have a limit of 600 g/ltr.

d. Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds.

e. Except Below Ground Wood Preservatives which have a limit of 600 g/ltr.

[Rule 1113 - *Architectural Coatings*; Version in SIP = 02/20/79, 40 CFR 52.220(c)(51)(xii)(B)-06/09/82 47 FR 25013; Current Rule Version = 02/24/03]

29. The following specified *Reference Method Tests* shall be used to determine compliance with the provisions of Rule 1114 requirements:

- (a) Samples of coatings and solvent shall be analyzed as prescribed by EPA Reference Method 24 for VOC content (without correction for exempt compounds) and ASTM D4457-85, or ARB Method 432 for determination of emissions of exempt

compounds. Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility Owner/Operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

- (b) Emissions of volatile organic compounds shall be measured as prescribed by EPA Reference Method 25 for determination of VOC emissions (without correction for exempt compounds) and EPA Method 18, or ARB Method 422 for measuring emission of exempt compounds.
- (c) Transfer efficiency shall be determined by *South Coast Air Quality Management District Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989*.
- (d) Overall abatement efficiency is the product of capture efficiency as determined by procedures described in *55 FR 26865, 29 June 1990*, and abatement device efficiency.
- (e) Manufacture's data supplied may be used to demonstrate compliance with Rule 1114 requirements if based on Rule 1114 approved test methods, above.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]

- 30. Owner/Operator of any coating, coating operation, or facility which is exempt from all or a portion of the VOC limits of Rule 1114 shall comply with the provisions of Rule 442 unless compliance with the limits specified in Rule 1114 are achieved.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

- 31. The Grams of VOC Per Liter of Coating limits of Rule 1114 shall not apply to facilities meeting one or more of the following:

- (a) Facilities that use a total of less than one gallon of coating, including any VOC-containing materials added to the original coating as supplied by the manufacturer, subject to this rule, in any one day, or; surface coating operations that emit not more than 3 pounds of VOCs per day and not more than 200 pounds of VOCs per calendar year.
- (b) Wood products coating operations which emit not more than 3 pounds of VOC per hour, before add-on controls.
- (c) Wood products coating operations which emit not more than 15 pounds of VOC per day, before add-on controls.
- (d) Facilities that do not exceed 10 tons per year theoretical potential emissions. "Theoretical potential emissions" is defined as the greater of design capacity or

maximum production (based on 8760 hours/year) before add-on controls.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

32. For the purposes of claiming an exemption pursuant Rule 1114, hourly or daily emissions shall be considered from January 1, 1996 forward.
[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]
33. Owner/Operator of any facility classified as exempt or claiming to be exempt under Rule 1114 shall meet the record keeping requirements of Rule 1114 so as to be able to certify the exemption status.
[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]
34. Once facility emissions exceed 3 pounds of VOC per hour, or 15 pounds of VOC per day, respectively, Owner/Operator and facility will remain subject to the Grams of VOC Per Liter of Coating limits of Rule 1114 even if facility emissions later fall below the applicability threshold.
[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]
35. Owner/Operator shall not apply coatings to wood products subject to the provisions of Rule 1114 unless the coating is applied with properly operating equipment, according to manufacturer's suggested guidelines, using one or more of the following methods:
 - (a) Flow Coat.
 - (b) Dip Coat.
 - (c) High-Volume Low-Pressure (HVLV) spray.
 - (d) Paint brush.
 - (e) Hand roller.
 - (f) Roll Coater.
[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]
36. Owner/Operator of wood products coating operations shall not apply any coating to a wood product which has a VOC content, including any VOC-containing material added to the original coating supplied by the manufacturer, which exceeds the applicable limit specified below, unless emissions to the atmosphere are controlled by air pollution abatement equipment with an overall capture and abatement efficiency of at least 85 percent as determined pursuant to Rule 1114 requirements:

LIMITS
Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds

<u>Coating</u>	<u>On and After 7/1/1997</u>		<u>On and After 7/1/2005</u>	
	<u>(g/L)</u>	<u>(lb/gal)</u>	<u>(g/L)</u>	<u>(lb/gal)</u>
Clear Topcoats				
containing Group II				
exempt compounds	550	4.6	275	2.3
not containing Group II				
exempt compounds	550	4.6	275	2.3
Fillers	500	4.2	275	2.3
High-Solid Stains	550	4.6	350	2.9
Inks	500	4.2	500	4.2
Mold-Seal Coatings	750	6.3	750	6.3
Multi-Colored Coatings	685	5.7	275	2.3
Pigmented Coatings	550	4.6	275	2.3
Sealers:				
containing Group II				
exempt compounds	550	4.6	240	2.0
not containing Group II				
exempt compounds	550	4.6	240	2.0
Strippers	350	2.9	350	2.9
Adhesives	250	2.1	250	2.1
Low-Solids Stains, Toners,				
or Wash Coats:				
containing Group II				
exempt compounds	480	4.0	120	1.0
not containing Group II				
exempt compounds	480	4.0	120	1.0

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

37. Owner/Operator using solvent for surface preparation and cleanup at facility shall comply with the following Rule 1114 requirements:
- (a) Owner/Operator shall not use an organic compound for surface preparation, except strippers, with VOC content in excess of 200 grams of VOC per liter of material (1.67 pounds per gallon).
 - (b) Owner/Operator shall use closed, nonabsorbent containers for the storage or disposal

- of cloth or paper used for solvent surface preparation and cleanup.
- (c) Owner/Operator shall store fresh or spent solvent in closed containers.
- (d) Owner/Operator shall not use organic compounds for the cleanup of spray equipment including paint lines unless an enclosed system is used for cleanup. The system must enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures. Equipment used shall minimize the evaporation of organic compounds to the atmosphere.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

38. Owner/Operator shall not specify use at the facility any coating to be applied to any wood products subject to the provisions of Rule 1114 that does not meet the limits specified in Rule 1114.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

39. Owner/Operator of facility subject to the requirements of Rule 1114 shall comply with the following requirements:

- (a) Facility coating operation shall have a continuous monitor, as approved by the APCO/District, for any add-on control device used to meet the control requirement of Part II Condition (A)(36).
- (b) Facility coating operation records of the monitoring devices pursuant to Part II Condition (A)(36?) and other data necessary to demonstrate compliance with the control requirements shall be maintained on the premises and made accessible to the District in a form and manner as specified by the APCO/District for a period of five (5) years.
- (c) Compliance with Part II Condition (A)(36) control efficiency requirements shall be determined by source testing and/or evaluating continuous monitor data.
- (d) Each monitoring device used pursuant to Part II Condition (A)(36) shall be calibrated in a manner approved by the APCO/District; and maintained in optimum working order.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

40. Owner/Operator shall supply the following information to the District from the manufacturer of coatings subject to this rule: Information shall include a designation of VOC as supplied on data sheets; including coating components, expressed in grams per liter or pounds per gallon, excluding water and exempt solvents.

[Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

41. Owner/Operator shall not increase use of the Group II exempt compounds, methylene chloride and/or 1,1,1-trichloroethane, to meet the VOC content standards of Rule 1114.
 [Rule 1114 - *Wood Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(244)(i)(C)(1) - 08/18/98 - 63 FR 44132]

42. Owner/Operator shall apply coatings to metal parts and products subject to the provisions of Rule 1115 by using equipment properly operated according to manufacturer's suggested guidelines using one or more of the following methods:
 - (a) Electrostatic attraction.
 - (b) High Volume Low Pressure (HVLP) spray equipment.
 - (c) Dip coat.
 - (d) Hand Application Methods.
 - (e) Other coating application methods as are demonstrated to have a Transfer Efficiency at last equal to one of the above methods, and which are used in such a manner that the parameters under which they are tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the APCO.
 [Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

43. Owner/Operator shall not apply to metal parts and products any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits specified below unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with a capture and control system Combined Efficiency of at least 85 percent:

LIMITS

(Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds)

<u>Coating</u>	<u>Air Dried</u>		<u>Baked</u>	
	g/L	(lb/gal)	g/L	(lb/gal)
General	420	(3.5)	360	(3.0)
Military Specification	420	(3.5)	360	(3.0)
Etching Filler	420	(3.5)	420	(3.5)
Solar-Absorbent	420	(3.5)	360	(3.0)
Heat-Resistant	420	(3.5)	360	(3.0)
High-Gloss	420	(3.5)	360	(3.0)
Extreme High-Gloss	420	(3.5)	360	(3.0)
Metallic	420	(3.5)	420	(3.5)
Extreme Performance	420	(3.5)	360	(3.0)
Prefabricated Architectural				

Component	420	(3.5)	275	(2.3)
Touch Up	420	(3.5)	360	(3.0)
Repair	420	(3.5)	360	(3.0)
Silicone-Release	420	(3.5)	420	(3.5)
High Performance				
Architectural	420	(3.5)	420	(3.5)
Camouflage	420	(3.5)	420	(3.5)
Vacuum-Metalizing	420	(3.5)	420	(3.5)
Mold-Seal	420	(3.5)	420	(3.5)
High-Temperature	420	(3.5)	420	(3.5)
Electric-Insulating Varnish	420	(3.5)	420	(3.5)
Pan-Backing	420	(3.5)	420	(3.5)
Pretreatment Wash Primer	420	(3.5)	420	(3.5)
Clear Coating	520	(4.3)	520	(4.3)

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

44. The provisions of Rule 1115(D)(5), shall not apply to the application of touch-up coatings, repair coatings, textured coatings, metallic coatings which have a metallic content of more than 30 grams per liter, mold-seal coatings, and to facilities that use less than three gallons of such coatings per day, as applied, including any VOC-containing materials added to the original coatings as supplied by the manufacturer.

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

45. The provisions of Rule; 1115(C)(1); (C)(2); and (C)(3), shall not apply to:
- (a) A facility which uses a total of less than one gallon of coating in any one day, including any VOC-containing materials added to the original coating as supplied by the manufacturer.
 - (b) Total noncompliant coating use per facility that does not exceed 55 gallons per year.
 - (c) Stencil coatings.
 - (d) Safety-indicating coatings.
 - (e) Magnetic data storage disk coatings.
 - (f) Solid-film lubricants.
 - (g) Adhesives.
 - (h) The coating of motor vehicle bodies at motor vehicle rework facilities.

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

46. Owner/Operator of any facility classified as exempt or claiming to be exempt under Rule 1115, shall meet the record keeping requirements of Rule 1115 so as to be able to certify the exemption status.
[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
47. Owner/Operator of any coating, coating operation, or facility which is exempt from all or a portion of the VOC limits of Rule 1115 shall comply with the provisions of Rule 442 unless compliance with the limits specified in Rule 1115 are achieved.
[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
48. Owner/Operator shall comply with the following requirements when using solvent for surface preparation, cleanup, and paint removal, including paint spray equipment:
- (a)
 - (i) VOC-containing materials for surface preparation shall not have a VOC content in excess of 200 grams of VOC per liter of material (1.67 pounds per gallon); or
 - (ii) VOC-containing materials has an initial boiling point of 190 deg C (374 deg F) or greater; or
 - (iii) VOC-containing materials has a total VOC vapor pressure of 20 mm Hg or less, at 20 deg C (68 deg F).
 - (b) Owner/Operator shall use closed, nonabsorbent containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
 - (c) Owner/Operator shall store fresh or spent solvent in closed containers.
 - (d) Owner/Operator shall not VOC-containing materials for the cleanup of application equipment used in coating operations, unless such material is collected in a closed container when not in use; and
 - (i) The application equipment is disassembled and cleaned in an enclosed system during the washing, rinsing, and draining processes; or
 - (ii) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or
 - (iii) Other application equipment cleaning methods that are demonstrated to be as effective as the equipment described above in minimizing emissions of VOC to the atmosphere are used, provided that the device has been approved in writing prior to use by the APCD.
- [Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

49. Owner/Operator shall not specify the use in the District of any coating to be applied to any metal parts and products subject to the provisions of this Rule 1115 that does not meet the limits and requirements of Rule 1115. This requirement applies to all written or oral contracts.
[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
50. Owner/Operator subject to Rule 1115 (F)(1)(b) shall comply with the following requirements:
- (a) The person shall maintain and produce a current list of coatings in use which provides all of the coating data necessary to evaluate compliance, including, but not limited to, the following information, as applicable:
 - 1. coating, catalyst, and reducer used.
 - 2. mix ratio of components used.
 - 3. VOC content of coating as applied.
 - 4. quantity of Group II exempt compounds used.
 - (b) The person shall maintain and produce records on a daily basis, by permit unit, including:
 - 1. coating and mix ratio of components used in the coating; and
 - 2. quantity of each coating applied.
 - (c) The person shall maintain and produce records on a daily basis showing the type and amount of solvent used for cleanup, Surface Preparation, or paint removal.
 - (d) Records shall be retained (at facility) and available for inspection by qualified District, CARB or EPA personnel for the previous 5 year period as required by this Title V / Federal Operating Permit (Reference Rule 1203(D)(1)(d)(ii)).
- [Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
51. Compliance with the limits of Rule 1115(C)(2) may be demonstrated by obtaining, and maintaining records from the coating/ paint manufacturer regarding the VOC content of the coating/paint and any solvents contained therein, or by analysis, by an independent testing laboratory.
[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
[40 CFR 70.6(a)(3)(B) – *Periodic Monitoring Requirements*]
52. The Owner/Operator of any facility electing to engage in the mixing of coatings/ paints or solvents shall be required to obtain and maintain an analysis of the mixture from an independent testing laboratory.

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

53. The following specified *Reference Method Tests* shall be used to determine compliance with the provisions required by Rule 1115(G):
- (a) The VOC content of coatings and solvents, as specified in subsections (C)(2) and (C)(4)(c)(i), shall be analyzed as prescribed by USEPA Reference Method 24 for VOC content (without correction for exempt compounds) and ASTM D4457-85, or CARB Method 432, for determination of emissions of exempt compounds. Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.
 - (b) Determination of the initial boiling point of liquid containing VOC, subject to subsection (C)(4)(c)(ii), shall be conducted in accordance with ASTM D1078-86.
 - (c) Calculation of total VOC vapor pressure for materials subject to subsection (C)(4)(c)(iii) shall be conducted in accordance with ASTM D2879-86. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM D3792-91 and D4457-85 and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM D2879-86 shall be corrected for partial pressure of water and exempt compounds.
 - (d) Measurement of solvent losses from alternative application cleaning equipment subject to (C)(4)(b)(iii) shall be conducted in accordance with the South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" (11/1/94).
 - (e) Measurement of acid content of a substance shall be determined by ASTM D1613-85.
 - (f) Measurement of metal content of coatings shall be determined in accordance with South Coast Air Quality Management District's "Laboratory Methods of Analysis for Enforcement Samples" manual, "Determination of Percent Metal in Metallic Coatings by Spectrographic Method, Method 311".
 - (g) Capture Efficiency shall be determined according to USEPA's technical document, "Guidelines for Determining Capture Efficiency" (1/9/95).
 - (h) The control efficiency of the Control Device shall be determined according to USEPA Test Methods 25, 25A or 25B for measuring the total gaseous organic concentrations at the inlet and outlet of the emissions Control Device, as contained in 40 CFR Part 60, Appendix A. USEPA Test Method 18 or CARB Method 422 shall be used to determine emissions of exempt compounds.

- (i) Measurement of solids content by weight of a substance shall be conducted in accordance with ASTM D1475-60.
- (j) Alternative test methods may be used upon obtaining the approval of the APCO, CARB and USEPA.
- (k) Demonstration of Transfer Efficiency of alternative application methods subject to subsection (C)(1)(a)(v) shall be conducted in accordance with South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User" (5/24/89).
- (l) Manufacturer's data supplied may be used to demonstrate compliance with Rule 1115 requirements if based on Rule 1115 approved test methods, above.

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

54. Rule 1116 - *Automotive Finishing Operations*; Any person who applies Coatings to Group I Vehicles (Buses and Mobile Equipment), Group II Vehicles (Passenger cars, Large/Heavy Duty Truck cabs and chassis, Light and Medium Duty Trucks and Vans, and motorcycles), or their parts and components, shall comply with subsections (a) or (b) below:

- (a) Group I Vehicles and Mobile Equipment
 Any person shall not Finish or refinish Group I Vehicles and Mobile Equipment or their parts and components where Color Match is not required, using any Coating with a VOC content in excess of the following limits, expressed as Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds, as applied, unless emissions of VOC to the atmosphere are controlled by air pollution abatement equipment with combined capture efficiency and control efficiency of the abatement device of at least 85 percent, and which as been approved in writing by the Air Pollution Control Officer:

	VOC limits
Pretreatment Wash Primer	780 g/L (6.5 lbs/gal)
Primer	250 g/L (2.1 lbs/gal)
Primer Sealer	250 g/L (2.1 lbs/gal)
Topcoat	340 g/L (2.8 lbs/gal)
Metallic Topcoat	420 g/L (3.5 lbs/gal)

	VOC limits
Extreme Performance	420 g/L (3.5 lbs/gal)

- (b) Any person shall not refinish Group II Vehicles (Passenger cars, Large/Heavy Duty Truck cabs and chassis, Light and Medium Duty Trucks and Vans, and motorcycles), their parts and components, or Group I Vehicles and Mobile Equipment where Color Match is required, using any Coating with a VOC content in excess of the following limits, expressed as Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds, as applied, unless emissions of VOC to the atmosphere are controlled by air pollution abatement equipment with a combined capture efficiency and control efficiency of the abatement device of at least 85 percent, and which has been approved in writing by the Air Pollution Control Officer:

	VOC limits
Pretreatment Wash Primer	780 g/L (6.5 lbs/gal)
Primer/Primer Surfacer	250 g/L (2.1 lbs/gal)
Primer Sealer	340 g/L (2.8 lbs/gal)
Topcoat	420 g/L (3.5 lbs/gal)
Metallic Topcoat	420 g/L (3.5 lbs/gal)
Multi-Stage Topcoat System	420 g/L (3.5 lbs/gal)

[Rule 1116 - *Automotive Finishing Operations*; [SIP: Approved: 6/13/95, 60 FR 31081, 40 CFR 52.220(c)(216)(i)(A)(1); Approved: 2/20/93, 58 FR 662833, 40 CFR 52.220(c)(188)(I)(B)(1)]

55. Rule 1118 - *Aerospace Vehicle Parts and Products Coating Operations*; Owner/Operator of facility subject to the requirements of Rule 1118 shall comply with the following requirements:
 Any person who manufactures or reworks aerospace vehicles by applying or specifying the use of surface coatings for aerospace vehicle parts and products shall comply with the following requirements:

A person shall not apply any coating or specify the use of any coating which, as applied, emits or may emit volatile organic compounds into the atmosphere in excess of the limits shown in the table below. These limits are expressed in Grams of VOC per Liter of Coating Less Water and Exempt Compounds (VOC content):

<u>Coating Type</u>	<u>VOC Limit</u>	
	<u>g/l</u>	<u>lb/gal</u>
Adhesive		
- Bonding Primer	250	2.1
- Non-structural adhesive	250	2.1
- Structural adhesive, autoclavable	50	0.4
- Structural adhesive, non-autoclavable	700	5.9
CARC	500	4.2
Electric/Radiation Effect	800	6.7
Extreme Performance		
- Coating	420	3.5
- Interior Topcoat	420	3.5
Fire-Resistant Coating		
- civilian	650	5.4
- military	970	7.7
Fuel Tank Coating	720	6.0
General Coating Product	350	2.9
High Temperature Coating	720	6.0
Interior Topcoat	340	2.8
Maskant for		

<u>Coating Type</u>	<u>VOC Limit</u>	
	<u>g/l</u>	<u>lb/gal</u>
- Chemical Processing	600	5.0
- Chemical Milling, Type I Etchant	622	5.2
- Chemical Milling, Type II Etchant	160	1.3
Pretreatment Wash Primer	780	6.6
Primer	350	2.9
Rain Erosion Resistant Coating	600	5.0
Sealant	600	5.0
Sealant Bonding Primer	720	6.0
Self Priming Topcoat	420	3.5
Space Vehicle Coating		
- Electrostatic-Discharge	800	6.7
- Other	1000	8.3
Temporary Protective Coating	250	2.1
Topcoat	420	3.5
Unicoat	420	3.5
Wing Coating	750	6.3

[Rule 1118 - *Aerospace Vehicle Parts and Products Coating Operations*; Version in SIP = 10/28/96: Approved: 8/17/98, 63 FR 43884, 40 CFR 52.220(c)(242)(I)(A)(1)]

56. If in the future the facility performs operations subject to the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Aerospace Manufacturing and Rework Facilities, those operations must comply with the requirements of that regulation. This Title V Permit and applicable District Permits would require modification to allow Aerospace Manufacturing and Rework Facilities within the Mojave Desert Air Quality Management District jurisdiction.

[40 CFR 63 Subpart GG]

[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

[MDAQMD Rule 1203]

57. Facility shall not conduct open detonation/ open burning without first complying with District Rule 444 and obtaining a modification of this Title V Permit and obtaining applicable District Permits.
[Rule 444 – *Open Outdoor Fires*; Version in SIP = Submitted as amended 11/25/96 on 3/3/97; Disapproved prior Rule 57 retained 12/21/78, 43 FR 59488, 40 CFR 52.220(c)(42)(xiii)(A) and 40 CFR 52.273(6)(12)(i)]
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[MDAQMD Rule 1203]
58. Facility shall comply with Subpart D—National Emission Standard for Beryllium Rocket Motor Firing should the facility conduct rocket motor tests containing Beryllium.

Subpart D—National Emission Standard for Beryllium Rocket Motor Firing

§ 61.40 Applicability.

The provisions of this subpart are applicable to rocket motor test sites.

§ 61.41 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

- (a) *Rocket motor test site* means any building, structure, facility, or installation where the static test firing of a beryllium rocket motor and/or the disposal of beryllium propellant is conducted.
- (b) *Beryllium propellant* means any propellant incorporating beryllium.

§ 61.42 Emission standard.

- (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$)) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an effect adverse to public health could occur.
- (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such tank shall not exceed 2.0 g/hr (0.0044 lb/hr) and a maximum of 10 g/day (0.022 lb/day).

[38 FR 8826, Apr. 6, 1973, as amended at 65 FR 62151, Oct. 17, 2000]

§ 61.43 Emission testing—rocket firing or propellant disposal.

- (a) Ambient air concentrations shall be measured during and after firing of a rocket motor or propellant disposal and in such a manner that the effect of these emissions can be compared with the standard. Such sampling techniques shall be approved by the Administrator.
- (b) All samples shall be analyzed and results shall be calculated within 30 days after samples are taken and before any subsequent rocket motor firing or propellant disposal at the given site. All results shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following determination of such results.
- (c) Records of air sampling test results and other data needed to determine integrated intermittent concentrations shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.
- (d) The Administrator shall be notified at least 30 days prior to an air sampling test, so that he may at his option observe the test.

§ 61.44 Stack sampling.

- (a) Sources subject to §61.42(b) shall be continuously sampled, during release of combustion products from the tank, according to Method 104 of appendix B to this part. Method 103 of appendix B to this part is approved by the Administrator as an alternative method for sources subject to §61.42(b).
- (b) All samples shall be analyzed, and beryllium emissions shall be determined within 30 days after samples are taken and before any subsequent rocket motor firing or propellant disposal at the given site. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determinations.
- (c) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.
- (d) The Administrator shall be notified at least 30 days prior to an emission test, so that he may at his option observe the test.

[38 FR 8826, Apr. 6, 1973, as amended at 50 FR 46294, Nov. 7, 1985]

- 59. Owner/Operator shall comply with all requirements of the District's Title V Program, MDAQMD Rules 1200 through 1210 (Regulation XII - *Federal Operating Permits*).
[Applicable via Title V Program interim approval 02/05/96 61 FR 4217]

B. FACILITYWIDE MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS:

1. Any data and records generated and/or kept pursuant to the requirements in this federal operating permit (Title 5 Permit) shall be kept current and on site for a minimum of five (5) years from the date generated. Any records, data or logs shall be supplied to qualified District, CARB or EPA personnel upon request.
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
2. Any Compliance/Performance testing required by this Federal Operating Permit shall follow the administrative procedures contained in the District's Compliance Test Procedural Manual. Any required annual Compliance and/or Performance Testing shall be accomplished by obtaining advance written approval from the District pursuant to the District's Compliance Test Procedural Manual. All emission determinations shall be made as stipulated in the Written Test Protocol accepted by the District. When proposed testing involves the same procedures followed in prior District approved testing, then the previously approved Written Test Protocol may be used with District concurrence.
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
3. Owner/Operator of permit units subject to Comprehensive Emissions Inventory Report / Annual Emissions Determinations for District, State, and Federal required Emission Inventories shall monitor and record the following for each unit:
 - (a) The cumulative annual usage of each fuel type. The cumulative annual usage of each fuel type shall be monitored from utility service meters, purchase or tank fill records.
 - (b) Fuel suppliers' fuel analysis certification/guarantee including fuel sulfur content shall be kept on site and available for inspection by qualified District, CARB or EPA personnel upon request. The sulfur content of diesel fuel shall be determined by use of ASTM method D2622-82, or (ASTM method D 2880-71, or equivalent). Vendor data meeting this requirement is sufficient.
[40 CFR 70.6(a)(3)(B) – *Periodic Monitoring Requirements*]
[Rule 204 - *Permit Conditions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
4. FEDERAL AND STATE REQUIREMENTS
Several Sections of the Federal Clean Air Act (FCAA) require the maintenance and use of emission inventory data for a variety of purposes. To improve and simplify emission reporting the USEPA has established new requirements for the statewide reporting of point, area and mobile sources emissions which is found in the Consolidated Emissions Reporting Rule, 40 CFR 51 Subpart A. (67 FR 39611, 6/10/2002).

The California Clean Air Act (CCAA, Health & Safety Code §§39000 et seq.) requires

the collection and maintenance of several different emissions inventories. These are: a criteria emission inventory (Health & Safety Code § 39607) and a toxic emission inventory (Health & Safety Code § 44340). In addition, specified sources of air pollutants are required to submit a Toxic Emission Inventory Plan (TEIP) and Toxic Emission Inventory Report (TEIR) (Health & Safety Code §§44341, 44342).

- 4 (a). Owner/Operator shall submit Compliance Certifications as prescribed by Rule 1203(F)(1) and Rule 1208. Compliance Certifications by a Responsible Official shall certify the truth, accuracy and completeness of the document submitted and contain a statement to the effect that the certification is based upon information and belief, formed after a reasonable inquiry; the statements and information in the document are true, accurate, and complete.
[40 CFR 70.6(c)(5)(i); Rule 1203(D)(1)(g)(vii); Rule 1203(F)(1); Rule 1208]
 - (b). Owner/Operator shall include in any Compliance Certification the methods used for monitoring such compliance.
[40 CFR 70.6(c)(5)(ii); Rule 1203(D)(1)(g)(viii)]
 - (c). Owner/Operator when submitting any Compliance Certification(s) to the MDAQMD shall contemporaneously submit such Compliance Certification(s) to USEPA.
[40 CFR 70.6(5)(iii); Rule 1203(D)(1)(g)(ix)]
 - (d). Owner/Operator shall comply with any additional certification requirements as specified in 42 U.S.C §7414(a)(3), Recordkeeping, Inspections, Monitoring and Entry (Federal Clean Air Act §114(a)(3)) and 42 U.S.C. §7661c(b), Permit Requirements and Conditions (Federal Clean Air Act §503(b)), or in regulations promulgated thereunder.
[Rule 1203 (D)(1)(g)(x)]
 - (e). On an annual basis, of any given year, Owner/Operator shall submit a *Compliance Certification Report*, within 90 days of the anniversary of the date of the issuance or renewal of the Federal Operating Permit, to the APCO/District pursuant to District Rule 1203. Each report shall be certified to be true, accurate, and complete by “The Responsible Official” and a copy of this annual report shall also be contemporaneously submitted to the EPA Region IX Administrator.
Rule 1203 (D)(1)(g)(v - x)]
5. Owner/Operator shall submit, on a semi-annual basis, a *Monitoring Report of Deviations* to the APCO/District, with a copy to the EPA Region IX Administrator. Each *Monitoring Report of Deviations* (covering a six month period) shall be submitted (1) no later than 30 days following the midpoint of the Federal Operating Permit Year (within 210 days following the Title 5 Permit anniversary date) and (2) as a separate report accompanying the *Annual Compliance Certification*. This *Monitoring Report of Deviations* shall be certified to be true, accurate, and complete by “The Responsible Official” and shall include the following information and/or data:

- (a) Summary of all reportable deviations from any federally enforceable requirement in this permit.
 - (b) Summary of all emissions monitoring and analysis methods required by any Applicable Requirement / federally - enforceable requirement.
 - (c) Summary of all periodic monitoring, testing or record keeping (including test methods sufficient to yield reliable data) to determine compliance with any Applicable Requirement / federally - enforceable requirement that does not directly require such monitoring.
 - (d) Summary of necessary requirements concerning use and maintenance of equipment including the installation and maintenance of monitoring equipment.
[1203(D)(1)(c)(i - iii); 1203(D)(1)(d)(i); Rule 1203(D)(1)(e)(i - ii); Rule 1203(D)(1)(g)(v - x)]
6. Owner/Operator shall promptly report all deviations from federal operating permit requirements including, but not limited to; any emissions in excess of permit conditions, deviations attributable to breakdown conditions, and any other deviations from permit conditions. Such reports shall include the probable cause of the deviation and any corrective action or preventative measures taken as a result of the deviation. [Rule 1203(D)(1)(e)(ii) and Rule 430(C)]
- Prompt reporting shall be determined as follows:
- (a) For deviations involving emissions of air contaminants in excess of permit conditions including but not limited to those caused by a breakdown, prompt reporting shall be within one hour of the occurrence of the excess emission or within one hour of the time a person knew or reasonably should have known of the excess emission. Documentation and other relevant evidence regarding the excess emission shall be submitted to the District within sixty (60) days of the date the excess emission was reported to the District. [SIP Pending: Rule 430 - Breakdown Provisions as amended 12/21/94 and submitted 2/24/95]
 - (b) Other deviations from permit conditions not involving excess emissions of air contaminants shall be reported to the District with any required monitoring reports at least every six (6) months. [Rule 1203(D)(1)(e)(i)]
7. If any facility unit(s) should be determined not to be in compliance with any federally-enforceable requirement during the 5-year permit term, then owner/operator shall obtain a *Schedule of Compliance* approved by the District Hearing Board pursuant to the requirements of MDAQMD Regulation 5 (Rules 501 - 518). In addition, Owner/Operator shall submit a *Progress Report* on the implementation of the *Schedule of Compliance*. The *Schedule of Compliance* shall contain the information outlined in (b), below. The *Progress Report* shall contain the information outlined in (c), below. The *Schedule of Compliance* shall become a part of this Federal Operating Permit by

administrative incorporation. The *Progress Report* and *Schedule of Compliance* shall comply with Rule 1201(I)(3)(iii) and shall include:

- (a) A narrative description of how the facility will achieve compliance with such requirements; and
- (b) A *Schedule of Compliance* which contains a list of remedial measures to be taken for the facility to come into compliance with such requirements, an enforceable sequence of actions, with milestones, leading to compliance with such requirements and provisions for the submission of *Progress Reports* at least every six (6) months. The *Schedule of Compliance* shall include any judicial order, administrative order, and/or increments of progress or any other schedule as issued by any appropriate judicial or administrative body or by the District Hearing Board pursuant to the provisions of Health & Safety Code §42350 et seq.; and
- (c) *Progress Reports* submitted under the provisions of a *Schedule of Compliance* shall include: Dates for achieving the activities, milestone, or compliance required in the schedule of compliance; and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not or will not be met; and any preventive or corrective measures adopted due to the failure to meet dates in the schedule of compliance.
[Rule 1201 (I)(3)(iii); Rule 1203 (D)(1)(e)(ii); Rule 1203 (D)(1)(g)(v)]

C. FACILITYWIDE COMPLIANCE CONDITIONS:

- 1. Subject to safety, security, and operational considerations, Owner/Operator shall allow an authorized representative of the MDAQMD to enter upon the permit holder's premises at reasonable times, with or without notice, upon presentation of credentials and other documents as may be required by law.
[40 CFR 70.6(c)(2)(i); Rule 1203(D)(1)(g)(i)]
- 2. Owner/Operator shall allow an authorized representative of the MDAQMD to have access to and copy any records that must be kept under condition(s) of this Federal Operating Permit.
[40 CFR 70.6(c)(2)(ii); Rule 1203(D)(1)(g)(ii)]
- 3. Owner/Operator shall allow an authorized representative of the MDAQMD to inspect any equipment, practice or operation contained in or required under this Federal Operating Permit.
[40 CFR 70.6(c)(2)(iii); Rule 1203(D)(1)(g)(iii)]

4. Owner/Operator shall allow an authorized representative of the MDAQMD to sample and/or otherwise monitor substances or parameters for the purpose of assuring compliance with this Federal Operating Permit or with any Applicable Requirement.
[40 CFR 70.6(c)(2)(iv); Rule 1203(D)(1)(g)(iv)]
5. Owner/Operator shall remain in compliance with all Applicable Requirements / federally enforceable requirements by complying with all compliance, monitoring, record-keeping, reporting, testing, and other operational conditions contained in this Federal Operating Permit. Any noncompliance constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; the termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal application.
[1203 (D)(1)(f)(ii)]
6. Owner/Operator shall comply in a timely manner with all applicable requirements / federally - enforceable requirements that become effective during the term of this permit.
[Rule 1201 (I)(2); Rule 1203(D)(1)(g)(v)]
7. Owner/Operator shall insure that all applicable subject processes comply with the provisions of 40 CFR 61, *National Emission Standards for Hazardous Air Pollutants*, subpart A, *General Provisions*, and subpart M, *Asbestos*.
[40 CFR 61, subparts A and M]
8. Owner/Operator shall notify APCO/District at least 10 working days before any applicable asbestos stripping or removal work is to be performed as required by section 61.145.b of 40 CFR 61 subpart M, *National Emission Standard for Asbestos*.
[40 CFR 61.145.b]
9. Owner/Operator shall notify the APCO/District, on an **annual** basis, postmarked by December 17 of the calendar year, of the predicted asbestos renovations for the following year as required by section 61.145.b of 40 CFR 61, subpart M [see cite for threshold triggering and applicability].
[40 CFR 61.145.b]

PART III
EQUIPMENT SPECIFIC APPLICABLE REQUIREMENTS; EMISSIONS
LIMITATIONS; MONITORING, RECORDKEEPING,
REPORTING AND TESTING REQUIREMENTS; COMPLIANCE
CONDITIONS; COMPLIANCE PLANS

PERMIT CONDITIONS; (UNLESS OTHERWISE STATED ALL FOLLOWING CONDITIONS RESULT FROM
RULE 204 – PERMIT CONDITIONS; VERSION IN SIP = CARB EX. ORDER G-73, 40 CFR
52.220(C)(39)(II)(B) - 11/09/78 43 FR 52237; CURRENT RULE VERSION = 07/25/77:

A. CONDITIONS APPLICABLE TO TWO ABRASIVE BLASTING SYSTEMS:

- A-1. MDAQMD PERMIT # A002952, 200 lb capacity, Lindsey Model 200
 - A-2. MDAQMD PERMIT # A003153, capacity unknown, Ervin Industries unit permitted to use steel shot and grit.
- 1. MDAQMD Permit A002952 only; This unit shall only use abrasives that have been certified by the California Air Resources Board (CARB)
 - 2. The owner/operator, o/o, shall operate this equipment in strict accord with the manufacturer's specifications and/or sound engineering principles.
 - 3. MDAQMD Permit A002952 only; Note: the opacity of emissions is limited to 40% when using CARB certified abrasives pursuant to California Code of Regulations, Title 17, Section 92520.
 - 4. MDAQMD Permit A003153 only; This unit shall not be operated unless it is vented to the dust collection unit operating under valid District permit C003154.
 - 5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour. Note: the opacity of emissions is limited to 40% when using CARB certified abrasives pursuant to California Code of Regulations, Title 17, Section 92520.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
 - 6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).

- (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
- (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
- (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
- (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

B. CONDITIONS APPLICABLE TO FOUR NATURAL GAS FIRED STEAM BOILERS:

- B-1. MDAQMD PERMIT # B001074, 23.8 MMBtu/hour, Nebraska Boiler, Model NS-B-35
 - B-2. MDAQMD PERMIT B001075, 18.8 MMBtu/hour, Todd Burner Company, Model D-15
 - B-3. MDAQMD PERMIT # B003315, 2.1 MMBtu/hour, Ajax Boiler, Model SGX-3000
 - B-4. MDAQMD PERMIT # B003316, 2.25 MMBtu/hour, Ajax Boiler, Model SGXB-2250
- 1. This unit shall be operated and maintained in strict accord with the recommendations of the manufacturer.
 - 2. MDAQMD Permits B001074, B003315, and B003316 only:
This boiler shall only be fired with natural gas.
 - 3. MDAQMD Permit B001075 only:
This boiler shall only be fired with natural gas and/or No.6 fuel oil.
 - 4. MDAQMD Permits B001074, B003315, and B003316 only:
The owner/operator (o/o) shall maintain a daily log of the amount of natural gas burned in this boiler. This log shall be maintained on-site for at least five (5) years and made available to the District upon request.
 - 5. MDAQMD Permit B001075 only:
The owner/operator (o/o) shall maintain a daily log of the amount of fuel burned in this boiler. This log shall be maintained on-site for at least five (5) years and made available to the District upon request.
 - 6. Stack and point source visible emissions from this facility, of any air contaminant (including smoke) into the atmosphere, shall not equal or exceed Ringelmann No. 1 for a period or periods aggregating more than three minutes in any one hour:

- a. While any unit is fired on Public Utilities Commission grade natural gas, Periodic Monitoring for combustion equipment is not required to validate compliance with the Rule 401 Visible Emissions limit. However, the Owner/Operator shall comply with the recordkeeping requirements stipulated elsewhere in this permit regarding the logging of fuel type, amount and suppliers certification information.
 - b. While any unit is fired on diesel fuel, Periodic Monitoring, in addition to required recordkeeping, is required to validate compliance with Rule 401 Visible Emissions limit as indicated below:
 - iv. On any of the above, if a visible emissions inspection documents opacity, an EPA Method 9 "Visible Emissions Evaluation" shall be completed within 3 working days, or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3 working day time frame.

[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
[40 CFR 70.6 (a)(3)(i)(B) - *Periodic Monitoring Requirements*]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]
9. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum of 15 consecutive minutes.

[Rule 407 - *Liquid and Gaseous Air Contaminants*; Version in SIP = CARB Ex. Order G-

73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes. (Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator is limited to combusting only natural gas fuel at this facility containing sulfur compounds not exceeding 800 ppm calculated as hydrogen sulfide at standard conditions, or any diesel/distillate fuel having a sulfur content not exceeding 0.5 percent by weight [0.20 % for auxiliary boiler]. Compliance with these requirements may be demonstrated by purchase of only PUC quality natural gas or California certified diesel fuels. The sulfur content of the diesel/distillate fuel shall be determined by use of ASTM method D 2622-82, or (ASTM method D 2880-71, or equivalent).
[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

C. CONDITIONS APPLICABLE TO EIGHT EMISSION CONTROL DEVICES

- C-1. MDAQMD PERMIT # C002909, Scrubber System, including settling/quench column, gas scrubber, 3500 gallon caustic/water tank w/treatment system and gas retention system.
 1. A test program for each new series of tests shall be submitted to the District and approved by the APCO in writing prior to operation of this equipment.
[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]
 2. This equipment shall be properly functioning when tests are conducted in the Test Stand covered under District Permit B002908, except when exempted in writing by the APCO based on a prior submitted test plan.
- C-2. MDAQMD PERMIT # C003154, Knockout Box, including a turbine axle fan, and stack

for equipment:

1. This unit shall be operated and maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.
 2. The opening in the knockout box, which holds the rocket motor shall be equipped with tight seals, which prevent particulate matter from escaping and restricts the amount of air entering the knockout box.
 3. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
 4. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
 5. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)
[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
- C-3. MDAQMD PERMIT # C003157, Baghouse, manufactured by Mikro Pulsaire, model

31855, equipped with cloth socks, and is powered by a 2 hp motor producing 1500 cfm airflow:

1. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
2. The baghouse, or the one under valid Permit C004010, shall be properly functioning and in operation when either the Raymond mill under valid Permit B003155 or the fluid energy mill under valid District Permit B003156 are operating.
3. An operations and maintenance log shall be maintained on-site and current for at least (5) years and shall be provided to qualified District, CARB or EPA personnel upon request.
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
4. An operating air lock device shall be fitted in each material discharge port.
5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete

cycle of operation or one hour, whichever is the lesser time period.

- (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

- C-4. MDAQMD PERMIT # C003396, Negative Air Machine air filtration device, Manufactured by Micro Trap, model MTC 2000 CFM,
- C-5. MDAQMD PERMIT # C003397, Negative Air Machine air filtration device, Manufactured by Micro Trap, model MTC 2000 CFM, and
- C-6. MDAQMD PERMIT # C003398, Negative Air Machine air filtration device, Manufactured by Micro Trap, model MTC 2000 CFM:
1. The HEPA filters shall meet UL 585 and UL 900 class 2 requirements.
 2. This air filtration unit shall be operated and maintained in strict accord with those recommendations of the manufacturer.
 3. This unit may, at the discretion of the owner/operator, be used on any asbestos project in the District with proper 10-day notification consistent with 40 CFR61.145. Proper notification is written and telephone communication a minimum of 10 district working days prior to actual placement of the unit at the new site.
 4. During full containment projects, view ports shall be provided for inspection purposes. The view port dimensions shall be at least 18 inches square and the bottom of said port no less than 3 to 4 feet from the floor level.
 5. Viewing ports shall be sufficient in number to allow observation of all stripping and removal of asbestos containing materials, ACM.
 6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
 7. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
(a) Where the volume discharged is between figures listed in the table the exact

- concentration permitted to be discharged shall be determined by linear interpolation.
- (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

8. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

- C-7. MDAQMD PERMIT # C004010, Baghouse, manufactured by Mikro Pulsaire, type 20-6, equipped with cloth socks, and powered by a 2 hp motor, and flow rate of 1500 cfm.

- 1. An operating air lock device shall be fitted in each material discharge port.
- 2. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
- 3. This baghouse, or the one under valid Permit C003157, shall be properly functioning and in operation when either the Raymond mill under valid Permit B003155 or the fluid energy mill under valid District Permit B003156 are operating.
- 4. An operations and maintenance log shall be maintained on-site and current for at least five (5) years and shall be provided to qualified District, CARB or EPA personnel upon request.

[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]

5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
- C-8. MDAQMD PERMIT # C004376, Vertical Quench Chamber to cool combustion gas; Venturi Rod Scrubber with 10,000 gallon recycle vessel to remove particulates; Venturi Sorber Scrubbers (2) each with 5000 gallon recycle vessel to remove fine particulates/acid absorption/demisting; and Deep Bed Filtration system and caustic mixing and storage tank.
1. This equipment shall operate concurrently with the Contained Burn Assessment Test Chamber under valid District permit B004375.

2. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
3. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
4. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)
[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
5. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]
6. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum

of 15 consecutive minutes.

- (a) The provisions of this condition shall not apply to emissions from internal combustion engines.

[Rule 407 - *Liquid and Gaseous Air Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]

D. CONDITIONS APPLICABLE TO THREE GASOLINE DISPENSING FACILITIES (NON RETAIL); MDAQMD PERMIT NUMBERS N001503, N003062 AND N003570, consisting of;

- D-1. MDAQMD Permit N001503 (Gasoline Dispensing Facility, Non-Retail): Gasoline Storage and Dispensing Facility, consisting of; an EnviroVault tank, 2,000 gallon capacity, rectangular 6' X 6', unknown model number, with Balance, Phase I and Phase II Vapor Recovery. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- D-2. MDAQMD Permit N003062 (Gasoline Dispensing Facility, Non-Retail): Gasoline Storage and Dispensing Facility, consisting of; unknown manufacturer, model number, unknown dimensions, 2000 gallon capacity, with Balance, Phase I, and Phase II Vapor Recovery. Maximum operating schedule is 24 hours/day, 8760 hours/year.
- D-3. MDAQMD Permit N003570 (Gasoline Dispensing Facility, Non-Retail): MDAQMD Permit Number N003570, Gasoline Storage and Dispensing Facility, consisting of; unknown manufacturer, model numbers, 17' long X 7.9 ' diameter, 6,000 gallon capacity, with Balance, Phase I, and Phase II Vapor Recovery. Maximum operating schedule is 24 hours/day, 8760 hours/year.

PERMIT CONDITIONS:

1. Owner/Operator shall conspicuously post in the gasoline dispensing area the operating instructions, the District's toll-free telephone number for complaints (1-800-635-4617) and a District-specified warning sign.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702].
2. The owner/operator (Owner/Operator) shall maintain a log of all inspections, repairs, and maintenance on equipment subject to Rule 461. Such logs or records shall be maintained at the facility for at least five (5) years and shall be available to the District upon request.
[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]

[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]

3. Any modifications or changes to the piping or control fittings of the vapor recovery system requires prior approval from the District.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
4. Owner/Operator shall not sell or supply for use within the District as a fuel for motor vehicles as defined by the Vehicle Code of the State of California, gasoline having a degree of unsaturation greater than that indicated by a Bromine Number of 30 as determined by ASTM Method D1159-66. Compliance with this rule may be demonstrated by supplying only California certified gasoline.
[Rule 432 - *Gasoline Specifications*; Version in SIP = Current, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011]
5. Owner/Operator shall not transfer, permit the transfer or provide equipment for the transfer of gasoline into or from any tank truck, trailer, or railroad tank car into the gasoline storage tank unless the transfer is made to tank equipped as required in Rule 463 or unless all of the following conditions are met:
 - (a) Tank is equipped with a permanent submerged fill pipe, and
 - (b) Such delivery vessel or tank is equipped with a vapor recovery system which has been certified by the California Air Resources Board, and the facility's vapor recovery system shall be capable of recovering or processing 95% of the displaced gasoline vapors, and
 - (c) All vapor return lines are connected between the tank truck, trailer, or railroad tank car and the gasoline tank, and the vapor recovery system is in operation in accordance with the manufacturer's specifications, and the delivery vehicle, including all hoses, fittings, and couplings, is maintained in a vapor-tight condition, as defined by the applicable California Air Resources Board certification and test procedures, and all equipment is operated and maintained according to the manufacturer's specifications.
 - (d) Hatch openings are limited to no more than 3 minutes in duration for visual inspection, provided that pumping has been stopped for at least 3 minutes prior to opening, and the hatch is closed fully before pumping is resumed.
 - (e) All lines are gravity drained, in such a manner that upon disconnect no liquid spillage would be expected; and
 - (f) Equipment subject to this condition shall be operated and maintained, with no defects, as follows:
 - (i) All fill tubes are equipped with vapor-tight covers, including gaskets; and

- (ii) All dry breaks have vapor-tight seals and are equipped with vapor-tight covers or dust covers; and
- (iii) Coaxial fill tubes are operated so there is no obstruction of vapor passage from the storage tank back to the delivery vehicle; and
- (iv) The fill tube assembly, including fill tube, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system; and
- (v) All storage tank vapor return pipes without dry breaks are equipped with vapor-tight covers, including gaskets.

[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]

6. Owner/Operator shall not transfer, or permit the transfer, or provide equipment for the transfer of gasoline from the gasoline storage tank into any motor vehicle tank of greater than 19 liters (5 gallons) capacity unless:
- (a) The dispensing unit used to transfer the gasoline from the gasoline tank to the motor vehicle fuel tank is equipped with a vapor recovery system which has been certified by the California Air Resources Board as capable of recovering 95% of the displaced gasoline vapors; and
 - (b) The vapor recovery system is operating in accordance with the manufacturer's specifications; and
 - (c) Equipment is operated and maintained with none of the following defects, pursuant to the definitions in California Administrative Code Section 94006, Subchapter 8, Chapter 1, Part III, of Title 17:
 - (i) Torn or cut boots;
 - (ii) Torn or cut face seals or face cones;
 - (iii) Loose or broken retractors;
 - (iv) Boots clamped or otherwise held in an open position;
 - (v) Leaking nozzles;
 - (vi) Loose, missing, or disconnected nozzle components, including but not limited to boots, face seals, face cones, check valve wires, diaphragm covers and latching devices;
 - (vii) Defective shutoff mechanisms;
 - (viii) Loose, missing, or disconnected vapor fuel hoses and associated components including but not limited to flow restrictors, swivels and anti-recirculation valves;
 - (ix) Crimped, cut, severed, or otherwise damaged vapor or fuel hoses;
 - (x) Missing, turned off, or otherwise not operating assist type vapor recovery systems, or any components of such systems;
 - (xi) Improper or non-"CARB certified" equipment or components;

- (xii) Inoperative, severely malfunctioning or missing vacuum producing device
 - (xiii) Inoperative, loose, missing or disconnected pressure/vacuum relief valves, vapor check valves or dry breaks.
- [Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]

7. Vapor processing or vapor recovery system used by Owner/Operator shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
8. Owner/Operator shall not install any new or rebuilt vapor recovery equipment unless the components and parts clearly identify by markings the certified manufacturing company and/or certified rebuilding company.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
9. Vapor recovery system shall at all times be maintained in accordance with the manufacturer's specifications and the State's certification.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
10. When problems or defects are detected and are associated with any vapor recovery, storage, delivery vessel or dispensing equipment, other than a breakdown of the central vapor incineration or processing unit, the Owner/Operator shall at the end of the cycle, as defined in Rule 461, remove the equipment from service and not use the equipment until it has been repaired, replaced or adjusted as necessary to remove the problem or defect.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
11. Owner/Operator shall not perform or permit the "pump-out" (bulk transfer) of gasoline from the gasoline storage tank unless such bulk transfer is performed using a vapor recovery system capable of returning the displaced vapors from the delivery vessel or other container being filled back to the gasoline storage tank. This vapor recovery is not required where the container is to be removed or filled with water for testing.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
12. Owner/Operator shall not store, or allow the storage of, gasoline in the gasoline storage tank unless the tank is equipped with a permanent submerged fill pipe and a certified

vapor recovery system.

[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]

13. Owner/Operator shall maintain a daily log of product throughput for gasoline dispensing facility.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]
14. Any violation determined by any one of the following listed *Reference Method Tests* shall constitute a violation of the Part III, Section D conditions:
 - (a) Vapor recovery system and gasoline dispensing equipment shall be maintained vapor tight as defined in Rule 461(B)(8).
 - (b) Vapor Recovery System Efficiency for Delivery Vessels shall be determined by the EPA Method entitled, *Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems* (method specified in the CTG EPA-450/2-78-051), or the CARB Method entitled, *Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks*.
 - (c) Reid Vapor Pressure shall be determined in accordance with ASTM Method D 323-82.
 - (d) Vapor Recovery System Efficiency for Bulk Plants shall be determined by CARB Method 202, "*Certification of Vapor Recovery Systems - Bulk Plants*".
 - (e) Vapor Recovery System Efficiency for Terminals shall be determined by CARB Method 203, "*Certification of Vapor Recovery Systems - Gasoline Terminals*".
 - (f) Vapor Recovery System Efficiency for Service Stations shall be determined by the CARB Methods in "*Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations*".

[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
15. Compliance with the requirement of the Phase II system to be 95 % effective for the recovery of displaced vapors is considered to be demonstrated by performing monthly visual inspections, including maintaining equipment as specified in the applicable ARB Executive Order certifying the system, including maintaining system vapor tight.
[Rule 461 - *Gasoline Transfer and Dispensing*; Version in SIP = Current, 40 CFR 52.220(c)(198)(i)(E)(1) - 05/03/95 - 60 FR 21702]
[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]
16. Any records required to be generated and/or kept by any portion of this Federal

Operating Permit shall be retained on-site by the Owner/Operator for at least five (5) years from the date the records were created.

[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]

[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]

- E. CONDITIONS APPLICABLE TO FOUR GRINDING AND ONE MIXING OPERATIONS TO PRODUCE SMALL QUANTITIES OF PROPELLANTS AND EXPLOSIVES; MDAQMD PERMIT NUMBERS B003141, B003145, B003146, B003155, AND B003156 consisting of;

- E-1. MDAQMD Permit Number B003141:
GRINDER, described as: Micropulverizer, Model Number Type ISH, capacity is 100 lb. Unit typically operates for approximately 3 h per batch and produces 3 batches in a 2 week period. There are two motors; a Drive and Feed Screw of 5 and ¼ hp respectively. B003141 also includes a 50 lb mill.

Conditions applicable to MDAQMD Permit B003141:

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of material ground. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.
2. This grinder shall only be used to grind ammonium perchlorate and other materials.
3. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
4. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
5. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.

- (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
- [Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

6. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.) [Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.
- [Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

E-2. MDAQMD Permit Number B003145:

Grinding System, including: Mill No. 1, Sweco, capacity of 20 gallons, driven by a 5 hp motor; Mill No. 2, Sweco, model M-785, capacity is 5 gallons, driven by a 0.25 hp motor; Mill No. 3, Sweco, model M-185, capacity is 1 gallon, driven by a 0.25 hp motor. Mills are used for grinding explosives or other materials with phenolic beads, using ethyl alcohol/water mixture as a lubricant. Control of emissions is achieved by the use of tightly fitting covers. Solvents are recovered by placing the materials in drums and collecting them as described on District permit B003143.

Conditions applicable to MDAQMD Permit B003145:

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of

material ground. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.

2. The grinders described above shall be limited to grinding explosives or other materials.
3. Only one of the grinders included in PTO B003145 shall be used at one time.
4. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)
[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

8. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

9. Owner/Operator of this facility shall not discharge organic materials into the atmosphere from equipment in which organic solvents or materials containing organic solvents are used, unless such emissions have been reduced by at least 85% or to the following:
- (a) Organic materials that come into contact with flame or are baked, heat cured or heat polymerized, are limited to 1.4 kilograms (3.1 pounds) per hour not to exceed 6.5 kilograms (14.3 pounds) per day.
 - (b) Organic materials emitted into the atmosphere from the use of photochemically reactive solvents are limited to 3.6 kilograms (7.9 pounds) per hour, not to exceed 18 kilograms (39.6 pounds) per day, except as provided in Rule 442, subsection (a)(1). All organic materials emitted for a drying period of 12 hours following their application shall be included in this limit.
 - (c) Organic materials emitted into the atmosphere from the use of non-photochemically reactive solvents are limited to 36.8 kilograms (81 pounds) per hour not to exceed 272 kilograms (600 pounds) per day. All organic materials emitted for a drying period of 12 hours following their application shall be included in this limit.
 - (d) The provisions of this condition shall not apply to the manufacture of organic solvents, or the transport or storage of organic solvents, or the transport or storage of materials containing organic solvents.
 - (e) The provisions of this condition shall not apply to the use of equipment for which other requirements are specified by Rules 461, 462, 463, and 464 or which are exempt from air pollution control requirements by said rules.

[Rule 442 - *Usage of Solvents*; Version in SIP = Current, 40 CFR 52.220(c)(51)(xii)(B) - 06/09/82 47 FR 25013]

- E-3. MDAQMD Permit Number B003155:
Raymond Hammer Mill, model 64059, with 500 lb capacity. One hour is the usual time for completion of a batch. Electrical motors used in the system include the drive, feed hoist, feeder, and feed screw; motor hp are 25, 6, 3, and 0.5 respectively.
Note: Grinding to 6-11 micron particle size of ammonium perchlorate in 250 lb batches for R & D is the usual operation. Emissions are controlled by grinding in a closed room and venting to cloth socks of 99.4% efficiency (see District permit C003157 or

C004010).

Conditions applicable to MDAQMD Permit B003155:

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of material mixed. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.
2. The Mill described above shall be limited to grinding ammonium perchlorate, and shall not be used unless vented to properly functioning collection system under valid District permit C003157 or C004010.
3. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
4. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
5. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
6. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete

cycle of operation or one hour, whichever is the lesser time period.

- (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

7. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

E-4. MDAQMD Permit Number B003156:

Fluid Energy Mill, Fluid Energy Aljet, model 8 Micro Jet, capacity of 400 lb. Maximum feed rate is 100 lb/h, and 8 h is the usual batch length. Device has two feed motors, one for liquid and one for solid; 0.25 hp each.

Conditions applicable to MDAQMD Permit B003156:

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of material mixed. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.
2. The Mill described above shall be limited to grinding ammonium perchlorate, and shall not be used unless vented to properly functioning collection system under valid District permit C003157 or C004010.
3. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
4. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
5. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown

in Rule 404, Table 404 (a).

- (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
- (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
- (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
- (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

6. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).

- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
- (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
- (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

7. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

- E-5. MDAQMD Permit Number B003146:

Mixer: Baker Perkins, model 52149. Unit has a capacity of 150 gal and is driven by a 50 hp motor. The unit was built in 1961 and is used to mix batches of propellants, explosives or inert simulate formulations.

Conditions applicable to MDAQMD Permit B003146:

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of material mixed. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.
2. The mixer shall only be used to mix propellants, explosives or inert simulate formulations.
3. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
4. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
5. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
6. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.) [Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, from any

single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

F. CONDITIONS APPLICABLE TO ORDNANCE TEST AND EVALUATION OPERATIONS; MDAQMD PERMIT NUMBERS B001065 through B001072, B003132, B004091, B004375, I001063, I001064, and I003131 consisting of;

- F-1. MDAQMD Permit Number B001065:
Static, horizontal test stand. This unit is used to test rocket motors fired by solid propellants to a maximum of 60,000 lb. This unit was constructed about 1958 or 1959 and includes a movable assembly building equipped with temperature conditioning system and a gantry crane whose capacity is 25 ton.

Conditions applicable to MDAQMD Permit B001065:

1. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 7) before and after each test; and
 - e. The results of each test.The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
2. This test stand shall be limited to the use of solid propellant rocket motors.
3. The maximum amount of solid propellant, which shall be used, on this stand in any 24-hour period from midnight to midnight is 60,000 lb.
4. The maximum number of large rocket motor tests, (>10,000 lb of solid propellant), that can be conducted in any 24-hour period, midnight to midnight, is one (1).
5. The maximum number of test stands at the Skytop Area, Permits B001065 through B001072 and B004375, that can be used for large rocket motor tests in any 24-hour

period, midnight to midnight, is one (1).

6. The maximum amount of solid propellant, which shall be used in any one test is 60,000 lb.
7. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version

= 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$)) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
 - (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

- F-2. MDAQMD Permit Number B001066:
Rocket Test Stand located at the SKYTOP AREA, Test Bay IA which is a static, horizontal unit. Rocket motors up to 10,000 lb may be tested in this area. Included is an assembly building that is movable and has temperature conditioning system. Installation was 1958 or 1959.

Conditions applicable to MDAQMD Permit B001066 :

1. This test stand shall be limited to the use of solid propellant rocket motors.
2. The maximum amount of solid propellant, which shall be used, on this stand in any 24-hour period from midnight to midnight is 10,000 lb.
3. The maximum number of large rocket motor tests, ($>10,000$ lb of solid propellant), that can be conducted in any 24-hour period, midnight to midnight, is one (1).

4. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072 and B004375) that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 10,000 lb.
6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 6) before and after each test; and
 - e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. This equipment shall be operated/ maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

ELEMENT OR COMPOUND

LIMITATIONS (PPM BY VOLUME)

Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL2)	450
Fluorine (F2)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).

(a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

- F-3. MDAQMD Permit Number B001067:

Rocket Test Stand located at the SKYTOP AREA, Bay II; static, vertical with nozzle down test stand. This test stand is designed to burn 60,000 lb of solid propellant. Included is an

assembly building with a temperature conditioning system. The facility was built in 1960.

Conditions applicable to MDAQMD Permit B001067 :

1. This test stand shall be limited to the use of solid propellant rocket motors.
2. The maximum amount of solid propellant, which shall be used, on this stand in any 24-hour period from midnight to midnight is 60,000 lb.
3. The maximum number of large rocket motor tests, (>10,000 lb of solid propellant), that can be conducted in any 24-hour period, midnight to midnight, is one (1).
4. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072 and B004375) that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 60,000 lb.
6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 6) before and after each test; and
 - e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. This equipment shall be operated/ maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.

[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per

cubic meter (ug-min/m³) (4.68 pound minutes per cubic foot (lb-min/ft³) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - National Emission Standards for Beryllium Rocket Motor Firing]

F-4. MDAQMD Permit Number B001068:

At the SKYTOP AREA, Test Bay IIA, a static, horizontal solid rocket test stand. This unit burns up to 300,000 lb of solid propellant. Included are a movable assembly building with temperature conditioning system and a 1 ton gantry crane. The facility was built in 1960.

Conditions applicable to MDAQMD Permit B001068 :

1. This test stand shall be limited to the use of solid propellant rocket motors.
2. The maximum amount of solid propellant which shall be used on this stand in any 24-hour period from midnight to midnight is 60,000 lb, unless prior approval of a test plan is obtained from the District.
3. The maximum number of large rocket motor tests (>10,000 lb of solid propellant) that can be conducted in any 24-hour period, midnight to midnight, is one (1).
4. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072, and B004375) that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 60,000 lb, unless prior approval of a test plan is obtained from the District.
6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;

- d. The meteorological conditions (see Condition 6) before and after each test; and
- e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.

- 8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
- 9. This equipment shall be operated/ maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
- 10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- 11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds that would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$)) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
 - (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

- F-6. MDAQMD Permit Number B001069:
At the SKYTOP AREA, Test Bay III, static tests stand with 9 pads. The pads are as follow:
TMDI 4, which are flat concrete;
MS-0, for vertical/horizontal firings;
MS-1, vertical/horizontal firings;
MS-2, multipurpose for specialized vertical/horizontal tests, such as partial burns for internal ballistics studies;
MS-3, vertical/horizontal firings;
MS-4, vertical/horizontal/command destruct.
This test stand uses solid rocket propellants up to 300,000 lb. The facility was built in 1960.

Conditions applicable to MDAQMD Permit B001069 :

1. This test stand shall be limited to the use of solid propellant rocket motors.
2. The maximum amount of solid propellant which shall be used on this stand in any 24-hour period from midnight to midnight is 100,000 lb, unless prior approval of a test plan

is obtained from the District.

3. The maximum number of large rocket motor tests, (>10,000 lb of solid propellant), that can be conducted in any 24-hour period, midnight to midnight, is one (1).
4. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072, and B004375) that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 100,000 lb, unless prior approval of a test plan is obtained from the District.
6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 6) before and after each test; and
 - e. The results of each test.The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. This equipment shall be operated/ maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions,

- calculated as sulfur dioxide (SO₂): 500 ppm by volume.
- (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
 [Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).
- (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter (ug-min/m³) (4.68 pound minutes per cubic foot (lb-min/ft³) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
- (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).
 [40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

- F-6. MDAQMD Permit Number B001070:
ROCKET TEST STAND at the SKYTOP AREA, Test Bay IV, which has 2 stands, both static. One is vertical/horizontal and the other is horizontal/vertical. These stands use solid propellant up to 60,000 lb per test. The facility was built in 1965.

Conditions applicable to MDAQMD Permit B001070 :

1. This test stand shall be limited to the use of solid propellant rocket motors, unless prior written approval of a test plan is obtained from the District.
2. The maximum amount of solid propellant that shall be used on this stand in any 24-hour period from midnight to midnight is 60,000 lb.
3. The maximum number of large rocket motor tests (>10,000 lb of solid propellant) that can be conducted in any 24-hour period, midnight to midnight, is one (1).
4. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072, and B004375) that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 60,000 lb.
6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 6) before and after each test; and
 - e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that

measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.

9. This equipment shall be operated/ maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
 [Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).
- (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
- (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).
- [40 CFR 61 Subpart D - National Emission Standards for Beryllium Rocket Motor Firing]

- F-7. MDAQMD Permit Number B001071:
ROCKET TEST STAND at the SKYTOP AREA, Test Bay VI, which is a static test stand of zero degrees horizontal and 45 and 85 and 90 degrees, vertical (nozzle down). This unit can fire up to 130,000 lb of solid rocket propellant. Included are a movable assembly building with a temperature controlling system and 2 gantry cranes of 65 and 6 ton capacities. The facility was built in 1985.

Conditions applicable to MDAQMD Permit B001071 :

1. This test stand shall be limited to the use of solid propellant rocket motors.
2. The maximum amount of solid propellant that shall be used on this stand in any 24-hour period from midnight to midnight is 130,000 lb.
3. The maximum number of large rocket motor tests ($>10,000$ lb of solid propellant) that can be conducted in any 24-hour period, midnight to midnight, is one (1).
4. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072, and B004375) that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 130,000 lb.

6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 6) before and after each test; and
 - e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. This equipment shall be operated/ maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing: (this condition only applies if a rocket motor containing beryllium is tested).
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
 - (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

F-8. MDAQMD Permit Number B001072:

Located at the Skytop Area, Test Bay VII. Device is a Horizontal Rocket Motor static test stand. This unit can fire up to 300,000 lb of solid fuel propellant. Included is a movable assembly building for temperature conditioning and a 10-ton gantry crane. Facility was built in 1984.

Conditions applicable to MDAQMD Permit B001072:

1. This test stand shall be limited to the use of solid propellant rocket motors.

2. The maximum amount of solid propellant which shall be used on this stand in any 24-hour period from midnight to midnight is 150,000 lb, unless prior approval of a test plan is obtained from the District.
3. The maximum number of large rocket motor tests, (>10,000 lb of solid propellant), that can be conducted in any 24-hour period, midnight to midnight, is one (1).
4. The maximum number of test stands at the Skytop Area, Permits B001065 through B001072 and B004375, that can be used for large rocket motor tests in any 24-hour period, midnight to midnight, is one (1).
5. The maximum amount of solid propellant, which shall be used in any one test, is 150,000 lb, unless prior approval of a test plan is obtained from the District.
6. The meteorological conditions that are required for a test firing are as follows:
 - a. The wind speed from any and all directions shall be less than 20 mph.
7. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions (see Condition 6) before and after each test; and
 - e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
8. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with recommendations of the manufacturer/supplier and/or sound engineering practices.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of

emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:

- (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
- (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

- 12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having a sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

- 13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (this condition only applies if a rocket motor containing beryllium is tested):

(a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter (ug-min/m³) (4.68 pound minutes per cubic foot (lb-min/ft³) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a

maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - National Emission Standards for Beryllium Rocket Motor Firing]

F-9. MDAQMD Permit Number B003132:

Located at the Aeroheat Test Facility, T-Range, consisting of the following:

<u>EQUIPMENT</u>	<u>AIRBREATHING ENGINE</u>	<u>AEROHEATING</u>	<u>ROCKET MOTOR</u>
Test Stand No.	1	2	2
Test Type:	Static	Heated Air Flow	Static
Position:	Horizontal	Horizontal	Horizontal/Vertical
Duration:	3 min	3 min	
Fuel Type:	Liquid Hydrocarbon (e.g. JP-10)	Propane	Solid Propellant
Fuel Use:	100 gal/test	100 gal/test	500 lb/test

Compressed Air: 3250 psig

Air Flow Rate: up to 200 lb/sec

Air Pressure: 15-1500 psi

This facility was installed in 1960

Conditions applicable to MDAQMD Permit B003132:

1. Operation of this equipment shall be conducted in compliance with all the data and specifications submitted with the application under which this permit has been issued unless specifically exempted hereunder.
2. The maximum volume of propane, which shall be used in any one test is 125 gal and the maximum calendar year volume shall not exceed 5000 gal.
3. The maximum volume of other liquid hydrocarbons, which shall be used in any one test is 125 gal and the maximum calendar year volume shall not exceed 5,000 gal.
4. The maximum weight of solid propellant, which shall be tested and/or used in any day, midnight to midnight, shall not exceed 1,000 lb and the calendar year weight shall not exceed 6000 lb.
5. The maximum number of tests which shall be conducted in any seven-day period is 10.
6. To test fire, the following meteorological conditions shall be required:
 - (a) The wind speed from any and all directions shall be less than 15 miles per hour, or 5

mph when a solid rocket motor is to be used.

7. The owner/operator, o/o, shall keep operational logs, which contain as a minimum the following information:
 - a. Test bay number and/or District permit number;
 - b. Date and time and duration of each test;
 - c. Weight, in lb, of propellant used in each test, and the gallons of any liquid hydrocarbon fuel (including propane);
 - d. The meteorological conditions, as in the condition above, both before, during and after each test; and
 - e. The results of each test.

The log shall be maintained current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.
8. No more than one test shall be permitted at the T-Range within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
9. The equipment shall be operated and maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (condition only applies if a rocket motor containing beryllium is tested):
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
 - (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

- F-10. MDAQMD Permit Number B004091:

ROCKET TEST STAND, (SKYTOP BAY 8); a static test stand with vertical exhaust into the atmosphere/skyward. Test stand was built in 1994 and uses a maximum of 12,000 lb of solid rocket propellant per day for solid rocket motor plume studies.

Conditions applicable to MDAQMD Permit B004091:

1. Only solid propellant rocket motors and/or large solid propulsion systems shall be test fired on this test stand unless prior approval of a test plan is obtained from the District.

2. The maximum amount of propellant used at this equipment shall be limited to 12,000 lb per calendar day and 72,000 lb per calendar month.
3. Meteorological conditions required for a rocket firing at this test stand are as follows:
 - a. Wind speed from any direction shall be less than 20 mph.
4. Operations logs shall include at least the following:
 - a. Date, Permit Number and time of firing;
 - b. Amount of propellant used in the firing;
 - c. Meteorological conditions pursuant to Condition 3 above, before and after the firing;
 - d. Results of the firing.
5. Operations logs pursuant to Condition 4 above shall be maintained current, on-site for at least five (5) years and shall be provided to qualified District, CARB or EPA personnel on request.
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
7. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

8. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having a sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
[40 CFR 70.6 (a)(3)(B) - *Periodic Monitoring Requirements*]
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
9. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (condition only applies if a rocket motor containing beryllium is tested):
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) ($4.68 \text{ pound minutes per cubic foot (lb-min}/\text{ft}^3$) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.
 - (b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

- F-11. MDAQMD Permit Number B004375:
TEST STAND, CONTAINED BURN TEST CHAMBER (CBAT) a 16 ft diameter steel cylinder approximately 70 ft long. Two hemispherical domes are described as follows: the forward one is removable for loading test charges while the aft dome is equipped with a 42 in diameter venturi. The chamber is lined with 4 in of high temperature refractory and is equipped with a water injection system, which maintains the chamber temperature at approximately 1000 degrees F. Located at MS3 Test Bay in Skytop.

Conditions applicable to MDAQMD Permit B004375:

1. Operation of this unit shall be conducted in compliance with data and specifications submitted with the application under which this permit has been issued unless otherwise noted on Permit To Operate.
2. This equipment shall not be operated unless vented to operating air pollution control

system (scrubbers) covered under valid District permit C004376, except as required in a test program that has received written approval from the District.

3. Only solid propellant rocket motors containing 50,000 pounds of propellant or less can be tested in this chamber.
4. The maximum number of test that can be conducted in this chamber in any 24-hour period (midnight to midnight) is one (1).
5. The maximum number of test stands at the Skytop Area (Permits B001065 through B001072, and B004375) that can be used for large rocket motors tests (>10,000 pounds of propellant) in any 24-hour period (midnight to midnight) is one (1).
6. The meteorological conditions required for a test firing are as follows;
 - a. The wind speed from any and all directions must be less than 20 mph.
7. No more than one test shall be permitted at the Skytop Area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
8. The equipment shall be operated and maintained in strict accord with the manufacturer's/supplier's recommendations and/or sound engineering principles.
9. The owner/operator (o/o) shall maintain operation logs, which contain at least the following information:
 - a. Test bay number and/or permit number;
 - b. Date and time of each test;
 - c. Purpose of each test; amount in pounds, of propellant used in each test;
 - d. The meteorological conditions before and after each test; and
 - e. The results of each test.The log shall be maintained current, on-site for a minimum of five (5) years and made available to qualified District, CARB or EPA personnel upon request.
10. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
11. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:

- (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
- (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

- 12. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

- 13. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (This condition only applies if a rocket motor containing beryllium is tested):

(a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter (ug-min/m³) (4.68 pound minutes per cubic foot (lb-min/ft³) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - *National Emission Standards for Beryllium Rocket Motor Firing*]

F-12. MDAQMD Permit Number I001063:

TEST STAND, a cook-off, heating and drop test site at CT-4 built circa 1960 with four 20-35 foot circular test pans and a 40 foot drop tower, where the following tests are performed:

Ordnance Cook-Off, the purpose of which is to determine the reaction of ordnance when suspended 3-5 feet above a 5-10 minute aircraft fuel fire, or when impacted by a projectile; Ordnance Drop, the purpose of which is to determine the survivability of ordnance when dropped from a 40 ft tower; and Aircraft Structural Items, the purpose of which is to determine how aircraft structural items will react in an aircraft fuel fire.

Conditions applicable to MDAQMD Permit I001063:

1. The maximum weight of ordnance which shall be tested at the sites with valid District permits I003131, I001063 and I001064 during any calendar day is 13,000 lbs.
2. The maximum volume of fuel which shall be burned at the sites with valid District permits I003131, I001063 and I001064 firing any calendar day is 15,500 gal of aviation fuel, 100 gal of gasoline, and 300 gal of propane.
3. Tests shall not be performed at this site unless the wind speed in all directions is less than 15 miles per hour.
4. The owner/operator (o/o) shall maintain current and on-site for a minimum of five (5) years operational logs, and shall provide said logs to qualified District, CARB or EPA personnel on request. Said operational logs shall contain, at a minimum, the following information for each test:
 - a. Test pan number and/or equipment used;
 - b. Date, start time and duration;
 - c. Weight of ordnance tested (in pounds);
 - d. Type(s) and volume(s) of fuel burned (in gallons);
 - e. Wind speed and direction for the duration; and
 - f. The test result.
5. No more than one test shall be performed at the CT-4 area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.
6. This equipment shall be operated and maintained in strict accord with the manufacturer/supplier recommendations and/or sound engineering principles.

7. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
- (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

8. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

9. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (This condition only applies if a rocket motor containing beryllium is tested):

- (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter (ug-min/m³) (4.68 pound minutes per cubic foot (lb-min/ft³) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in

which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - National Emission Standards for Beryllium Rocket Motor Firing]

F-13. MDAQMD Permit Number I001064:

TEST STAND, a cook-off, heating and explosive test facility at CT-6 with a single 100 foot square test pad and two 250-foot towers. Ordnance is suspended from the towers and detonated. Ordnance cook-off and aircraft structural tests may also be performed at this site. This facility was built in the 1960s.

Conditions applicable to MDAQMD Permit I001064:

1. The maximum weight of ordnance which shall be tested at the sites with valid District permits I003131, I001063 and I001064 during any calendar day is 13,000 lbs.
2. The maximum volumes of fuel which shall be burned at the sites with valid District permits I003131, I001063 and I001064 during any calendar day is 15,500 gal of aviation fuel, 100 gal of gasoline, and 300 gal of propane.
3. Tests shall not be performed at this site unless the wind speed in all directions is less than 15 miles per hour.
4. The owner/operator (o/o) shall maintain current and on-site for a minimum of five (5) years operational logs, and shall provide said logs to qualified District, CARB or EPA personnel on request. Said operational logs shall contain, at a minimum, the following information for each test:
 - a. Equipment used;
 - b. Date and time;
 - c. Weight of ordnance tested (in pounds);
 - d. Type(s) and volume(s) of fuel burned (in gallons);
 - e. Wind speed and direction for the duration; and
 - e. The test result.
5. No more than one test shall be performed at the CT-6 area within an interval, such that measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.

6. This equipment shall be operated and maintained in strict accord with the manufacturer/supplier recommendations and/or sound engineering principles.
7. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

8. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

9. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (This condition only applies if a rocket motor containing beryllium is tested):
 - (a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per

cubic meter (ug-min/m³) (4.68 pound minutes per cubic foot (lb-min/ft³) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - National Emission Standards for Beryllium Rocket Motor Firing]

F-14. MDAQMD Permit Number I003131:

TEST STAND, an ordnance cook-off test site at CT-1, the purpose of which is to determine the reaction of ordnance in an aircraft fuel fire and/or when impacted by a projectile. The ordnance is suspended 3-5 ft above the fuel and must be able to pass a 5-10 min aircraft fuel fire without detonation. A slow cook-off is done by wrapping the ordnance in fiberglass. The site has four 20-35 foot square test pans. This facility was built in the 1960s.

Conditions applicable to MDAQMD Permit I003131:

1. The maximum weight of ordnance which shall be tested at the sites with valid District permits I003131, I001063 and I001064 during any calendar day is 13,000 lbs.
2. The maximum volumes of fuel which shall be burned at the sites with valid District permits I003131, I001063 and I001064 during any calendar day is 15,500 gal of aviation fuel, 100 gal of gasoline, and 300 gal of propane.
3. Tests shall not be performed at this site unless the wind speed in all directions is less than 15 miles per hour.
4. The owner/operator (o/o) shall maintain current and on-site for a minimum of five (5) years operational logs, and shall provide said logs to qualified District, CARB or EPA personnel on request. Said operational logs shall contain, at a minimum, the following information for each test:
 - a. Test pan number and/or equipment used;
 - b. Date, start time and duration;
 - c. Weight of ordnance tested (in pounds);
 - d. Type(s) and volume(s) of fuel burned (in gallons);
 - e. Wind speed and direction for the duration; and
 - f. The test result.
5. No more than one test shall be performed at the CT-1 area within an interval, such that

measurable exposure from one test is added to the emissions from other tests, or other activities emitting significant pollutants.

6. This equipment shall be operated and maintained in strict accord with the manufacturer/supplier recommendations and/or sound engineering principles.
7. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

8. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
9. Owner/operator shall comply with the National Emission Standards for Beryllium Rocket Motor Firing (This condition only applies if a rocket motor containing beryllium is

tested):

(a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$) (4.68 pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an affect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such a tank shall not exceed 2 g/hr (0.0044lb/hr) and a maximum of 10 g/day (0.022lb/day).

[40 CFR 61 Subpart D - National Emission Standards for Beryllium Rocket Motor Firing]

- G. The CT-3 test range is used for research and development of new technologies for the demilitarization of munitions.
The fire deck research and test facility is used for conducting two basic types of tests. Fire fighting tests are performed to investigate fire fighting techniques. Tests typically involve testing different types of fire extinguishents, fire fighting techniques and fire fighting equipment, and evaluating their performance in different scenarios. Fire characterization tests are performed to quantify what happens during a fire and typically involve creating fires in and around structures and/or equipment, and collecting data (e.g., temperature, pressure, compartment breach, etc).

- G-1. MDAQMD Permit Number B002908:
TEST STAND (CT-3) located at the CT-3 Test Range, at the CT-3 Access Road. Test Stand includes experimental, limited use testing equipment. Controls for this equipment may include the Scrubbing System under District permit number C002909.

Conditions applicable to MDAQMD Permit B002908:

1. An operator's log shall be maintained by the owner/operator (o/o) for a minimum of five (5) years. This log shall contain, as a minimum: the date, time, and duration of each test; the type and amount of material(s) tested, and results of the emissions monitored/analyzed.
2. Operation of the equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued, unless otherwise noted below.
3. A test program for each series of tests will be submitted to the District for written

approval prior to operation of the equipment.

4. This equipment shall not be operated unless it is vented to operating air pollution control system covered by valid District permit C002909, except as required in a test program that has received written approval from the District.
5. Solid propellant rocket motor(s) containing more than 400 pounds of propellant shall not be tested in the sub-scale contained burn test chamber.
6. The total daily emissions for particulate matter (PM10) from this test stand shall be limited to 250 pounds per day.
7. This equipment shall only be operated/maintained in strict accord with manufacturer's/supplier's recommendations and/or sound engineering principles.

- G-2. MDAQMD Permit Number B005156:
FIRE DECK RESEARCH AND TEST FACILITY; a concrete pad with proper drainage troughs. Additionally there are: a JP-8 fuel storage tank (6,000 gallon capacity); firefighting piping; and a fuel/water management system. Estimates of time are not precise, but for emissions purposes, 120 days of use per calendar year and 2,000 gallons of fuel per day have been projected.

Conditions applicable to MDAQMD Permit B005156:

1. The owner/operator, (o/o), shall log the dates of use, the type and amount of fuel used during the tests characterizations/fire fighting training.
 2. The log shall be maintained current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request. Note: Emissions based on fuel consumption are part of facility emissions inventory.
- H. This section includes eleven ovens used for drying and curing of propellants, explosives, and simulate formulations. Most of these ovens are heated with steam produced by boilers described in the boilers section of this document. The remaining ovens have electric heaters. A number of smaller (<53 cubic feet) ovens are also present, and are included in the exempt equipment listing in the facility information section of this document.

- H-1. MDAQMD Permit Number B003139:
OVEN, Custom built into bldg 15724, 1200 cubic feet (12' X 10' X 10'), 200° F
Maximum, heated with steam at atmospheric pressure for the purpose of curing explosives,
propellants or inert simulate formulations.
- H-2. MDAQMD Permit Number B003140:
OVEN (BLDG 15730, ROOM 102), manufactured by Haskris, 96 cubic feet (4ft X 4ft X
6ft), Maximum temperature 200°F, Heating System Steam, at atmospheric pressure, for the
purpose of curing explosives, propellants or inert simulate formulations.
- H-3. MDAQMD Permit Number B003142:
OVEN (BLDG 15744), located at the SALT WELLS AREA. A custom built oven in the
building. The dimensions of this oven are 4 ft by 18 ft by 6 ft. The heating system is steam
which produces a temperature of 180 degrees F, maximum at atmospheric pressure. The
oven is used to dry explosives (HMX and RDX), to cure propellants, explosives and inert
simulate formulations.
- H-4. MDAQMD Permit Number B003144:
OVEN (BLDG 15750, ROOM 104), at the SALT WELLS AREA, which is custom built.
The oven has dimensions of 17 ft by 12 ft by 8 ft and uses steam to achieve a maximum
temperature of 210 degrees F at atmospheric pressure. This oven is used to cure liners,
propellants, explosives and inert simulate formulations and the drying of explosives.
- H-5. MDAQMD Permit Number B003147:
OVEN, at the SALT WELLS AREA, BUILDING 15950, a Moore and Hanks oven. This
unit has dimensions of 10 ft by 9 ft by 9 ft. Steam is used to maintain a maximum
temperature of 240 degrees F at atmospheric pressure. The unit is used to cure rocket
motor liners.
- H-6. MDAQMD Permit Number B003148:
OVEN (BLDG 15950), at the SALT WELLS AREA, a Greive Corporation Oven. This
unit is model number HC-500. The oven is 5 ft by 5 ft by 5 ft, is heated by 30 kW(e) to a
maximum of 290 degrees F at atmospheric pressure. The unit is used to cure rocket motor
liners.
- H-7. MDAQMD Permit Number B003159:
OVEN (BLDG 15590), at the SALT WELLS AREA, a custom built oven. This unit has
dimensions of 3.5 ft by 8 ft by 4.5 ft. It heated with steam to produce a maximum
temperature of 230 F at atmospheric pressure.

This unit is used to dry explosives; heat metal parts; melt TNT based explosives from ordnance, and the curing of explosives, propellants or inert simulate formulations.

- H-8. MDAQMD Permit Number B003160:
OVEN (BLDG 15726), at the SALT WELLS AREA, an oven (deep casting pit). This unit is 6 ft in diameter and 30 ft deep. It uses steam to produce a maximum F 140 degrees F at 5 mm of mercury column pressure.
- H-9. MDAQMD Permit Number B003161:
OVEN (BLDG 15707), at the SALT WELLS AREA. This unit is by Spray Booth Systems of Ft. Worth, Texas. Its dimensions are 20 ft by 10 ft by 12 ft high. It is heated by steam to produce a maximum temperature of 250 degrees F at atmospheric pressure. Input power drives the following associated motors: exhaust fan, 30 hp; circulation fan, 2 hp; and steam condensate pump, 1 hp.
This unit is used to cure propellants, explosives and inert simulate formulations; drying explosives and melting TNT-based explosives from ordnance.
- H-10. MDAQMD Permit Number B003162:
OVEN, ENVIRONMENTAL CHAMBER (BLDG 15707), at the SALT WELLS AREA. This unit is by Tenney Engineering, model VIT. Its dimensions are 18 ft by 18 ft by 11 ft high. It is heated by steam to produce a maximum temperature of 220 degrees F, at atmospheric pressure. Electric motors associated with this unit are as follow: Steam condensate return, 1 hp; Refrigerator Compressors (2 each @ 25 hp); Cooling tower circulation pump, 0.3 hp; Cooling tower booster pump, 3 hp; and Cooling tower blower, 3 hp.

CONDITIONS APPLICABLE TO TEN OF THE ELEVEN OVENS USED FOR THE DRYING AND CURING OF PROPELLANTS, EXPLOSIVES, OR INERT FORMULATIONS (MDAQMD PERMIT NUMBERS; B003139, B003140, B003142, B003144, B003147, B003148, B003159, B003160, B003161, AND B003162):

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of material cured. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.
2. This oven shall only be used to cure explosives, propellants or inert simulate formulations, or for other purposes as described on the Permits to Operate.
3. This equipment shall only be operated/maintained in strict accord with

manufacturer's/supplier's recommendations and/or sound engineering principles.

H-11. MDAQMD Permit Number B003143:

OVEN, located at SALT WELLS AREA, BUILDING 15750, ROOM 103, which is a custom built oven in the building. The dimensions of the oven are 17 ft by 12 ft by 8 ft. It uses steam to attain a maximum temperature of 210 degrees F at atmospheric pressure. This oven is used to evaporate ethyl alcohol/water solutions from propellant, explosive and other materials, which have been ground with phenolic beads (see District permit B003145). The aqueous alcohol is evaporated and condensed in a closed system for re-use. The condenser is a water cooled heat exchanger. The oven is also used to dry and cure propellants and inert simulate formulations.

CONDITIONS APPLICABLE TO OVEN, MDAQMD PERMIT NUMBER B003143:

1. The owner/operator (o/o) shall maintain operation logs which contain at least the following information: date, time and duration of each use and the type and amount of material cured. The logs shall be maintained on-site for five (5) years and made available to qualified District, CARB or EPA personnel upon request.
 2. This oven shall only be used to evaporate ETHO/H2O from propellant, explosive and other materials after grinding (B003145) and condense the ETHO/H2O in a closed system for reuse; and to cure and dry propellants, explosives and inert simulate formulations.
 3. This equipment shall only be operated/maintained in strict accord with manufacturer's/supplier's recommendations and/or sound engineering principles.
 4. The evaporated ETHO/H2O shall be condensed in a water-cooled heat exchanger.
- I. PERMITTABLE PAINTING OPERATIONS. FOUR ARE ENCLOSED PAINT SPRAY BOOTHS. TWO ARE HIGH VOLUME LOW PRESSURE (HVLP) PAINT SPRAY GUNS PERMITTED FOR USE OUTDOORS. THE PERMITS FOR THE HVLPs WERE OBTAINED TO PERFORM OUTDOOR PAINTING ON ITEMS TOO LARGE TO FIT INTO THE PAINT BOOTH, AND WHICH CANNOT BE PAINTED WITH AN AIRLESS SPRAY UNIT.

I-1. MDAQMD Permit Number P005142:

PAINT SPRAY GUN, SATA, model Mini-Jet NR/HVLP spray gun. This unit is used to perform outdoor painting of items which are too large to fit into the paint booth, but which also cannot be painted with an airless spray unit.

I-2. MMAQMD Permit Number P008346:

PAINT SPRAY GUN, DeVilbis Model OMX-510. This unit is used to perform outdoor painting of items which are too large to fit into the paint booth, but which also cannot be painted with an airless spray unit.

CONDITIONS APPLICABLE TO MDAQMD PERMIT NUMBERS P005142 and P008346:

1. All coatings, diluents, thinners and solvents shall comply with District Rule that is applicable to coating being used. Rules 1114, 1115, 1116 and 442 pertain to Wood Products Coating Operations; Metal Parts & Products Coatings Operations; Automotive Refinishing Operations and Photochemically Reactive Solvents respectively.
2. A daily log shall be maintained which contains at least the following items:
 - a. Equipment used to apply coating.
 - b. Type of coating used and its VOC limit under each applicable rule.
 - c. Quantity of coating used and its VOC content.
 - d. Total VOC emissions.
3. This log shall be kept current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.
4. The total VOC emissions from this permit unit shall not exceed 20 lb/day, midnight to midnight.

I-3 MDAQMD Permit Number S002204:

PAINT SPRAY BOOTH, Bldg 31198; This building is 16 ft by 18 ft by 34 ft high. There are 60 inlet filters and 60 outlet filters. Each filter is 20 in square and 1 in thick. The pressure drop across the filters is designed for 0.5-2.0 inches of water with 2 electric motor fans drawing 28,800 ACFM through the outlet filters.

CONDITIONS APPLICABLE TO MDAQMD PERMIT NUMBER S002204:

1. All coatings, diluents, thinners and solvents shall comply with District Rule that is applicable to coating being used. Rules 1114, 1115, 1116, 1118, and 442 pertain to Wood Products Coating Operations; Metal Parts & Products Coatings Operations; Automotive Refinishing Operations, Aerospace Vehicle Parts and Products Coating Operations, and Photochemically Reactive Solvents respectively.
2. A daily log shall be maintained which contains at least the following items:
 - (a) Equipment used to apply coating;
 - (b) Type of coating used and its VOC limit under the applicable rule;
 - (c) Quantity of coating used and its VOC content;
 - (d) Total VOC emissions; and
 - (e) Type of material being coated.
 - (f) Pressure drop across the filters.
3. This log shall be kept current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.
4. Other than coatings subject to Rule 1118, only High Volume Low Pressure spray equipment and/or those other methods described in District Rule 1115 (C)(1)(a) shall be used for applying coatings. (C)(1)(a) as follows;
Owner/Operator shall apply coatings to metal parts and products subject to the provisions of Rule 1115 by using equipment properly operated according to manufacturer's suggested guidelines using one or more of the following methods:
 - (a) Electrostatic attraction.
 - (b) High Volume Low Pressure (HVLP) spray equipment.
 - (c) Dip coat.
 - (d) Hand Application Methods.
 - (e) Other coating application methods as are demonstrated to have Transfer Efficiency at least equal to one of the above methods, and which are used in such a manner that the parameters under which they are tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the APCO.[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
5. For coatings subject to Rule 1118, only the application methods listed below may be used:
 - (a) Electrostatic application, or
 - (b) Flow coat application, or

- (c) Dip coat application, or
 - (d) High volume, low pressure spraying (HVLP), or
 - (e) Electrodeposition, or
 - (f) Hand application methods, or
 - (g) Detailing or touch-up guns, or
 - (h) Alternative application techniques – Alternative application techniques for coatings may be used when the alternative technique is demonstrated to have a transfer efficiency at least equal to one of the above methods, when used in such a manner that the parameters under which they are tested are permanent features of the application technique. Such alternative application techniques shall be approved in writing prior to use by the APCO.
- [Rule 1118(C)(2).

- 6. Discharge filters shall be installed and maintained in a tightly mounted and dimensionally stable condition, free from excessive deposits or interference with air flow passages. Differential pressure drops across the discharge filters shall be maintained with the 0.5-2.0 inches of water recommended by the manufacturer/design value.

- I-4. MDAQMD Permit Number S003135:
SPRAY BOOTH, Building 15950, a Binks unit, whose dimensions are 9.5 ft by 11 ft by 8 ft high. This unit has double layer, 4 in pleated paper filters and operate at a pressure drop of 0.5-1.0 inches of water.

CONDITIONS APPLICABLE TO MDAQMD PERMIT NUMBER S003135:

- 1. All coatings, diluents, thinners and solvents shall comply with District Rule that is applicable to coating being used. Rules 1114, 1115, 1116, 1118, and 442 pertain to Wood Products Coating Operations; Metal Parts & Products Coatings Operations; Automotive Refinishing Operations, Aerospace Vehicle Parts and Products Coating Operations, and Photochemically Reactive Solvents respectively.
- 2. A daily log shall be maintained of the VOC emissions from this facility which contains at least the following items:
 - (a) Equipment used to apply coating.
 - (b) Type of coating used and its VOC limit under the applicable Rule.
 - (c) Quantity of coating used and its VOC content.
 - (d) Total VOC's generated by B. and C. above if covered by the above applicable Rules.
 - (e) Type of material being coated.

- (f) Pressure drop across the filters.
3. This log shall be kept current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.
4. Other than coatings subject to Rule 1118, only High Volume Low Pressure spray equipment and/or those other methods described in District Rule 1115 (C)(1)(a) shall be used for applying coatings. (C)(1)(a) as follows;
Owner/Operator shall apply coatings to metal parts and products subject to the provisions of Rule 1115 by using equipment properly operated according to manufacturer's suggested guidelines using one or more of the following methods:
- (a) Electrostatic attraction.
 - (b) High Volume Low Pressure (HVLP) spray equipment.
 - (c) Dip coat.
 - (d) Hand Application Methods (including aerosol spray cans).
 - (e) Other coating application methods as are demonstrated to have Transfer Efficiency at least equal to one of the above methods, and which are used in such a manner that the parameters under which they are tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the APCO.
[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
5. For coatings subject to Rule 1118, only the application methods listed below may be used:
- (a) Electrostatic application, or
 - (b) Flow coat application, or
 - (c) Dip coat application, or
 - (d) High volume, low pressure spraying (HVLP), or
 - (e) Electrodeposition, or
 - (f) Hand application methods, or
 - (g) Detailing or touch-up guns, or
 - (h) Alternative application techniques – Alternative application techniques for coatings may be used when the alternative technique is demonstrated to have a transfer efficiency at least equal to one of the above methods, when used in such a manner that the parameters under which they are tested are permanent features of the application technique. Such alternative application techniques shall be approved in writing prior to use by the APCO.
[Rule 1118(C)(2).
6. Discharge filters shall be installed and maintained in a tightly mounted and dimensionally

stable condition, free from excessive deposits or interference with air flow passages. Differential pressure drops across the discharge filters shall be maintained with the 0.5-1.0 in w.g. recommended by the manufacturer/design value.

- I-5. MDAQMD Permit Number S003138:
SPRAY BOOTH, Building 11680, a custom built unit. The painting surface area is the table in the middle of the room, whose dimensions are 19 ft by 25 ft by 12 ft high. There are 36 filters, whose dimensions are 19.5 in square by 1.75 in thick and 8 filters that are 20" x 24" x 2", the design pressure drop is 0.5-1.0 inches of water. A 3 hp motor/fan exhausts 9750 ACFM through the filters.

CONDITIONS APPLICABLE TO MDAQMD PERMIT NUMBER S003138:

1. All coatings, diluents, thinners and solvents shall comply with District Rule that is applicable to coating being used. Rules 1114, 1115, 1116, 1118, and 442 pertain to Wood Products Coating Operations; Metal Parts & Products Coatings Operations; Automotive Refinishing Operations, Aerospace Vehicle Parts and Products Coating Operations, and Photochemically Reactive Solvents respectively.
2. A daily log shall be maintained of the VOC emissions from this facility, which contains at least the following items:
 - (a) Equipment used to apply coating.
 - (b) Type of coating used and its VOC limit under the applicable Rule.
 - (c) Quantity of coating used and its VOC content.
 - (d) Total VOC's generated by B. and C. above if covered by the above applicable Rules.
 - (e) Type of material being coated.
 - (f) Pressure drop across the filters.
3. This log shall be kept current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.
4. Other than coatings subject to Rule 1118, only High Volume Low Pressure spray equipment and/or those other methods described in District Rule 1115 (C)(1)(a) shall be used for applying coatings. (C)(1)(a) as follows;
Owner/Operator shall apply coatings to metal parts and products subject to the provisions of Rule 1115 by using equipment properly operated according to manufacturer's suggested guidelines using one or more of the following methods:
 - (a) Electrostatic attraction.

- (b) High Volume Low Pressure (HVLP) spray equipment.
- (c) Dip coat.
- (d) Hand Application Methods (including aerosol spray cans).
- (e) Other coating application methods as are demonstrated to have Transfer Efficiency at least equal to one of the above methods, and which are used in such a manner that the parameters under which they are tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the APCO.

[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]

5. For coatings subject to Rule 1118, only the application methods listed below may be used:
- (a) Electrostatic application, or
 - (b) Flow coat application, or
 - (c) Dip coat application, or
 - (d) High volume, low pressure spraying (HVLP), or
 - (e) Electrodeposition, or
 - (f) Hand application methods, or
 - (g) Detailing or touch-up guns, or
 - (h) Alternative application techniques – Alternative application techniques for coatings may be used when the alternative technique is demonstrated to have a transfer efficiency at least equal to one of the above methods, when used in such a manner that the parameters under which they are tested are permanent features of the application technique. Such alternative application techniques shall be approved in writing prior to use by the APCO.
- [Rule 1118(C)(2).
6. Discharge filters shall be installed and maintained in a tightly mounted and dimensionally stable condition, free from excessive deposits or interference with airflow passages. Differential pressure drops across the discharge filters shall be maintained with the 0.5-1.0 inches of water recommended by the manufacturer/design value.
- I-6. MDAQMD Permit Number S007809:
SPRAY BOOTH, a Col-Met spray booth, Model TCC45PDT with AMU, 16' H x 16' W x 45' D (interior), equipped with an exempt 2.2 MMBtu/hr comfort space heating unit. This unit has a single bank of 20" x 20" x 1" deep intake filters, triple exhaust filters, and a 7.5 hp exhaust fan generating 25,600 SCFM.

CONDITIONS APPLICABLE TO MDAQMD PERMIT NUMBER S007809:

1. All coatings, diluents, thinners and solvents shall comply with District Rule that is applicable to coating being used. Rules 1114, 1115, 1116, 1118, and 442 pertain to Wood Products Coating Operations; Metal Parts & Products Coatings Operations; Automotive Refinishing Operations, Aerospace Vehicle Parts and Products Coating Operations, and Photochemically Reactive Solvents respectively.
2. The owner/operator (o/o) shall maintain current and on-site for a minimum of five (5) years a daily operational log. This daily log shall be provided to qualified District, CARB or EPA personnel on request and shall include at a minimum the following information:
 - (a) Type and amount (in pounds or gallons) of coating and solvent used (preparation, thinning, cleanup or other);
 - (b) VOC content of each type of coating and solvent in pounds per gallon or grams per liter;
 - (c) The method of application and type of substrate for each use;
 - (d) Total VOC emissions in pounds per calendar day; and
 - (e) Total VOC emissions in pounds per calendar year (summarized in January for the prior year).
3. Other than coatings subject to Rule 1118, only High Volume Low Pressure spray equipment and/or those other methods described in District Rule 1115 (C)(1)(a) shall be used for applying coatings. (C)(1)(a) as follows;
Owner/Operator shall apply coatings to metal parts and products subject to the provisions of Rule 1115 by using equipment properly operated according to manufacturer's suggested guidelines using one or more of the following methods:
 - (a) Electrostatic attraction.
 - (b) High Volume Low Pressure (HVLP) spray equipment.
 - (c) Dip coat.
 - (d) Hand Application Methods (Aerosol spray cans are a permitted application method.)
 - (e) Other coating application methods as are demonstrated to have Transfer Efficiency at least equal to one of the above methods, and which are used in such a manner that the parameters under which they are tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the APCO.
[Rule 1115 - *Metal Parts and Products Coating Operations*; Version in SIP = Current, 40 CFR 52.220(c)(239)(i)(A)(2) - 12/23/97 62 FR 67002, effective 2/23/98]
4. For coatings subject to Rule 1118, only the application methods listed below may be used:

- (a) Electrostatic application, or
 - (b) Flow coat application, or
 - (c) Dip coat application, or
 - (d) High volume, low pressure spraying (HVLN), or
 - (e) Electrodeposition, or
 - (f) Hand application methods, or
 - (g) Detailing or touch-up guns, or
 - (h) Alternative application techniques – Alternative application techniques for coatings may be used when the alternative technique is demonstrated to have a transfer efficiency at least equal to one of the above methods, when used in such a manner that the parameters under which they are tested are permanent features of the application technique. Such alternative application techniques shall be approved in writing prior to use by the APCO.
- [Rule 1118(C)(2).

- 5. The total amount of VOC emitted from this equipment shall not exceed 20 pounds per day or 4,000 pounds per year.
- 6. The exempt heater incorporated into this equipment shall be used only when necessary to maintain a comfortable working temperature within the booth.

J. THIS SECTION COVERS INTERNAL COMBUSTION ENGINES USED FOR A WIDE RANGE OF PURPOSES.

The majority of these engines are portable electrical generator sets used in remote portions of the facility to provide power to equipment during tests.

Five of the engines drive water pumps used during certain types of rocket motor test firings (the rocket motor test facilities are described in the “ordnance test and evaluation” section of this document).

Six of the engines are backup or emergency electrical generators.

Two of the engines drive stationary hydraulic winches used to raise test items at one the remote test sites.

Of the remaining four engines, one is an emergency fire-fighting pump for an aqueous film forming foam (AFFF) system, and three are emergency firefighting (water) pumps.

A number of permit-exempt engines are operated at the facility. These engines either

have a maximum continuous rating of less than 100 brake horsepower, or they are registered pursuant to the California air resources board portable equipment registration program.

- J-1. MDAQMD Permit Number B003435:
I.C.E. - GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine rated at 102 bhp. The engine model is 4BT-3.9-G2.
- J-2. MDAQMD Permit Number B003436:
I.C.E. - GENERATOR, at VARIOUS LOCATIONS AT THE FACILITY, Cummins, model 4BT-3.9-G2, rated at 102 bhp.
- J-3. MDAQMD Permit Number B003437:
I.C.E. - GENERATOR, at VARIOUS LOCATIONS AT FACILITY, Cummins engine model 4BT-3.9-G2, rated at 102 bhp.
- J-4. MDAQMD Permit Number B003438:
I.C.E. - GENERATOR, at VARIOUS LOCATIONS AT THE FACILITY, Cummins engine model 4BT-3.9-G2 rated at 102 bhp.
- J-5. MDAQMD Permit Number B003439:
I.C.E. - GENERATOR, at VARIOUS LOCATIONS AT THE FACILITY, Cummins engine model 4BT-3.9-G2 rated at 102 bhp.
- J-6. MDAQMD Permit Number B003440:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS AT THE FACILITY, Cummins engine model 4BT-3.9-G2 rated at 102 bhp.
- J-7. MDAQMD Permit Number B003443:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine model 4BT-3.9-G2 rated at 102 bhp.
- J-8. MDAQMD Permit Number B003445:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine, model D333 rated at 170 bhp.
- J-9. MDAQMD Permit Number B003448:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Allis-Chalmers engine model 3500 rated at 120 bhp.

- J-10. MDAQMD Permit Number B003451:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Detroit Diesel engine model RC4913, rated at 134 bhp.
- J-11. MDAQMD Permit Number B003452:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Detroit Diesel engine model RC4913 rated at 134 bhp.
- J-12. MDAQMD Permit Number B003454:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Detroit Diesel engine model RC4913 rated at 134 bhp.
- J-13. MDAQMD Permit Number B003455:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Detroit Diesel engine model RC4913 rated at 134 bhp.
- J-14. MDAQMD Permit Number B003456:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Detroit Diesel engine model RC4913 rated at 134 bhp.
- J-15. MDAQMD Permit Number B003458:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 rated at 170 bhp.
- J-16. MDAQMD Permit Number B003459:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 rated at 170 bhp.
- J-17. MDAQMD Permit Number B003460:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 rated at 170 bhp.
- J-18. MDAQMD Permit Number B003461:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 rated at 170 bhp.
- J-19. MDAQMD Permit Number B003462:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 rated at 170 bhp.

- J-20. MDAQMD Permit Number B003463:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 and rated at 170 bhp.
- J-21. MDAQMD Permit Number B003464:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 and rated at 170 bhp.
- J-22. MDAQMD Permit Number B003465:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 and rated 170 bhp.
- J-23. MDAQMD Permit Number B003466:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 and rated at 170 bhp.
- J-24. MDAQMD Permit Number B003467:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 and is rated at 170 bhp.
- J-25. MDAQMD Permit Number B003468:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine model D333 and is rated at 170 bhp.
- J-26. MDAQMD Permit Number B003476:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Detroit Diesel engine model 6711C24M rated at 205 bhp.
- J-27. MDAQMD Permit Number B003477:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine, model D333 rated at 170 bhp.
- J-28. MDAQMD Permit Number B003478:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine, model D333 rated at 170 bhp.
- J-29. MDAQMD Permit Number B003630:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine, model D333 rated at 170 bhp.

- J-30. MDAQMD Permit Number B003908:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, engine make and model unknown, rated at 474 bhp.
- J-31. MDAQMD Permit Number B003920:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine, model D333, rated at 170 bhp.
- J-32. MDAQMD Permit Number B003921:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Caterpillar engine, model D333, rated at 170 bhp.
- J-33. MDAQMD Permit Number B003922:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine model 4BT-3.9-G2, rated at 102 bhp.
- J-34. MDAQMD Permit Number B003923:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine, model 4BT-3.9-G2 rated at 102 bhp.
- J-35. MDAQMD Permit Number B003924:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine model 4BT-3.9-G2 rated at 102 bhp.
- J-36. MDAQMD Permit Number B003925:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine model 4BT-3.9-G2, rated at 102 bhp.
- J-37. MDAQMD Permit Number B003958:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine model 4BT-3.9-G2 rated at 102 bhp.
- J-38. MDAQMD Permit Number B003971:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine, model 4BT-3.9-G2, rated at 102 bhp.
- J-39. MDAQMD Permit Number B003972:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine, model 4BT3.9, rated at 102 bhp.

- J-40. MDAQMD Permit Number B003973:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins engine, model 4BT-3.9-G2, rated at 102 bhp.
- J-41. MDAQMD Permit Number B003974:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, which is a Cummins engine, model 4BT-3.9-G2, rated at 102 bhp.
- J-42. MDAQMD Permit Number B004426:
I.C.E. – GENERATOR, at SUPERIOR VALLEY, a Detroit Diesel engine, model 8063-7416, rated at 474 bhp. This engine has 6 cylinders, burns diesel fuel at a maximum of 24 gal/h and 1800 rpm. The engine is direct injected, aftercooled, turbo-charged and has the ignition timing retarded 4 degrees. These conditions are considered by this District to meet BACT for this type of unit.
- J-43. MDAQMD Permit Number B004902:
I.C.E. – GENERATOR, at the SKYTOP COMPLEX, VARIOUS LOCATIONS, Cummins diesel engine, model 4BT-3.9-G2, rated at 102 bhp.
- J-44. MDAQMD Permit Number B004903:
I.C.E. – GENERATOR, at the SKYTOP COMPLEX, VARIOUS LOCATIONS, Cummins diesel engine, model 4BT-3.9-G2, rated at 102 bhp.
- J-45. MDAQMD Permit Number B008075:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins diesel engine, model 6CTA-8.3-G2, rated at 252 bhp. This engine is direct injected, after cooled, and turbocharged.
- J-46. MDAQMD Permit Number B008076:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins diesel engine, model 6CTA-8.3-G2, rated at 252 bhp. This engine is direct injected, after cooled, and turbocharged.
- J-47. MDAQMD Permit Number B008077:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins diesel engine, model 6CTA-8.3-G2, rated at 252 bhp. This engine is direct injected, after cooled, and turbocharged.
- J-48. MDAQMD Permit Number B008078:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Volvo diesel

engine, model TWD123OVE, rated at 343 bhp. This engine is direct injected, after cooled, and turbocharged.

- J-49. MDAQMD Permit Number B008385:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins diesel engine, model 6CTA-8.3-G2, rated at 252 bhp. This engine is direct injected and turbocharged.
- J-50. MDAQMD Permit Number B008386:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins diesel engine, model 6CTA-8.3-G2, rated at 252 bhp. This engine is direct injected, after cooled, and turbocharged.
- J-51. MDAQMD Permit Number B008658:
I.C.E. – GENERATOR, at VARIOUS LOCATIONS ON THE FACILITY, Cummins diesel engine, model 6CTA-8.3-G2, rated at 252 bhp. This engine is direct injected, after cooled, and turbocharged.

The following are conditions are applicable to MDAQMD Permits B003435-B003440, B003443, B003445, B003448, B003451-B003452, B003454-B003456, B003458-B003468, B003476-B003478, B003630, B003908, B003920-B003925, B003958, B003971-B003974, B004426, B004902, B004903, B008075, B008076, B008077, B008078, B008385, and B008386:

1. This I.C. Engine shall only burn diesel fuel; No. 1 or No. 2 fuel oil; JP-5; or JP-8.
2. All fuels burned by this I.C. Engine shall not contain sulfur in excess of 0.05% by weight.
The owner/operator (o/o) shall require from the supplier analytical results relating to the sulfur content of the fuel delivered and shall not accept delivery whenever the sulfur concentration exceeds 0.05% by weight. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
3. The o/o shall maintain copies of these delivery results on-site and provide them to qualified District, CARB or EPA personnel on request.
4. An operations log shall be maintained on-site for at least five (5) years and be made available to qualified District, CARB or EPA personnel on request. This log shall contain, as a minimum the total hours operated each day, and if an "Hour Meter" is available the reading at the beginning and end of each operating day; and the date and

amount (gallons) of fuel delivery.

5. This I.C. Engine shall only be operated/maintained in strict accord with manufacturer's/supplier's recommendations and/or sound engineering principles.
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
7. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
9. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version

= 02/20/79]

10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.
(Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- J-52. MDAQMD Permit Number B004898:
I.C.E. – PUMP, at the SKYTOP COMPLEX, Caterpillar diesel engine, model 3516STD, rated at 2,000 bhp.
- J-53. MDAQMD Permit Number B004899:
I.C.E. – PUMP, at the SKYTOP COMPLEX, Caterpillar diesel engine, model 3408, rated at 393 bhp.
- J-54. MDAQMD Permit Number B004900:
I.C.E. – PUMP, at the SKYTOP COMPLEX, Cummins diesel engine, model VT-8-430-IP, rated at 430 bhp.
- J-55. MDAQMD Permit Number B004901:
I.C.E. – PUMP, at the SKYTOP COMPLEX, Cummins diesel engine, model HR61P, rated at 130 bhp.
- J-56. MDAQMD Permit Number B004904:
I.C.E. – PORTABLE COMPRESSOR, at the SKYTOP COMPLEX, VARIOUS LOCATIONS, Caterpillar diesel engine, model 9F1746, rated at 254 bhp.
- J-57. MDAQMD Permit Number B004905:
I.C.E. – PUMP, at the SKYTOP COMPLEX, Cummins diesel engine, model NTT-1855-P, rated at 450 bhp.

The following are conditions are applicable to MDAQMD Permits B004898, B004899, B004900, B004901, B004904, and B004905:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted.
2. The equipment is limited to using diesel fuel whose sulfur content does not exceed 0.05% on a weight per weight basis. Compliance with this condition shall be established through records of the fuel sulfur content of each load of fuel accepted at this facility. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
3. The o/o shall operate all equipment described in this permit in strict accord with the recommendations of the manufacturer or supplier and/or sound engineering principles.
4. The o/o shall maintain a monthly operational log for this equipment. The log shall contain at a minimum a description of all repairs or maintenance performed on the equipment, the starting and stopping times and dates of equipment use and the amount of fuel burned. This log shall be maintained with the unit for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.
5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table

405(a).

- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
- (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
- (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

- 8. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

- 9. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.

(Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)

[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

J-58. MDAQMD Permit Number B007946:
IC ENGINE, HYDRAULIC WINCH (SOUTH RANGE - W SUSP TOWER), Cummins,
Diesel, Model No HRP, Direct Injected, 160bhp.

J-59. MDAQMD Permit Number B007947:
IC ENGINE, HYDRAULIC WINCH (SOUTH RANGE - E SUSP TOWER), Cummins,
Diesel, Model No HRP, Direct Injected, 160bhp.

The following are conditions are applicable to MDAQMD Permits; B007946, and

B007947:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted.
2. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
3. The owner/operator, (o/o), shall use only diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis in this unit. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
4. This equipment shall not be operated more than 10 hours in any calendar day.
5. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request:
 - a. Date of each use;
 - b. Duration of each use, in minutes;
 - c. Fuel consumed during each calendar year, in gallons;
 - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
7. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

8. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

9. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.
(Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)

[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

- J-60. Internal Combustion Engine; MDAQMD Permit Number B007673:
I.C.E. – GENERATOR, at building 15813, Allis-Chalmers diesel fired, turbo-charged engine rated at 150 bhp.

The following are conditions are applicable to MDAQMD Permit B007673:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted.
2. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
3. B007673 shall be limited to use for back-up power, defined as when normally available power has been interrupted, and/or as part of a testing program which does not exceed 60 minutes of operation per week. The total operating time for this generator shall not exceed 50 hours per calendar year without the written approval of the APCO.
4. The owner/operator, (o/o), shall use only diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis in this unit. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
5. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request:
 - a. Date of each use;
 - b. Duration of each use, in minutes;
 - c. Fuel consumed during each calendar year, in gallons;
 - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
7. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete

- cycle of operation or one hour, whichever is the lesser time period.
- (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
- (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
- (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)
[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
9. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]
10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.
(Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- J-61. MDAQMD Permit Number E004897:
IC ENGINE – EMERGENCY PUMP FOR FIREFIGHTING SYSTEM (AFFF), Chrysler

gasoline engine, model HT413810, rated at 140 bhp.

The following are conditions are applicable to MDAQMD Permit E004897:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted.
2. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
3. This unit shall be limited to use for fire fighting and as part of a testing program, which does not exceed 60 minutes of operation per week.
4. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to qualified District, CARB or EPA personnel on request:
 - a. Date of each use;
 - b. Duration of each use, in minutes;
 - c. Fuel consumed during each calendar year, in gallons;
5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)
- [Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)
- [Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]
9. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes. (Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
- [Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- J-62. MDAQMD Permit Number E007943:
IC ENGINE, EMERGENCY GENERATOR (SOUTH RANGE - NATO SITE), Caterpillar diesel engine model No. 3208, Direct Injected, Ignition Retarded, rated at 241 bhp.
- J-63. MDAQMD Permit Number E007944:
IC ENGINE, EMERGENCY GENERATOR (SOUTH RANGE - KIM SITE), Caterpillar diesel engine, model No. 3208, Direct Injected, Ignition Retarded, rated at 241 bhp.

The following are conditions are applicable to MDAQMD Permit E007943, and E007944:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise below.
2. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
3. This unit shall be limited to use for emergency power (defined as when normally available power has been interrupted) and as part of a testing program, which does not exceed 60 minutes of operation per week. This equipment shall not be operated for more than 200 total hours per calendar year.
4. The owner/operator (o/o) shall use only diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis in this unit. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
5. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to qualified District, CARB or EPA personnel on request:
 - a. Date of each use or test;
 - b. Duration of each test, in minutes;
 - c. Total operating time each calendar year, in hours;
 - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
7. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or

- gaseous fuels in steam generators or gas turbines.
- (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
- [Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.
- [Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
9. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)
- [Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]
10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes. (Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
- [Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- J-64. MDAQMD Permit Number E007945:

IC ENGINE, EMERGENCY FIRE PUMP (SOUTH RANGE - SEA SITE 1), Caterpillar diesel engine, model No. 3208, Direct Injected, rated at 160 bhp.

J-65. MDAQMD Permit Number E007948:
IC ENGINE, EMERGENCY FIRE PUMP (SOUTH RANGE - SEA SITE 3), Detroit Diesel, model No. 50348312, Direct Injected, Turbo Charged, rated at 202 bhp.

J-66. MDAQMD Permit Number E007949:
IC ENGINE, EMERGENCY FIRE PUMP (SOUTH RANGE - BLDG. 70036), Cummins diesel engine model No. V378F1, Direct Injected, rated at 111 bhp.

The following conditions are applicable to MDAQMD Permit E007945, E007948, and E007949:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
3. This unit shall be limited to use for emergencies and as part of a testing program, which does not exceed 60 minutes of operation per week. This equipment shall not be operated for more than 200 total hours per calendar year.
4. The owner/operator (o/o) shall use only diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis in this unit. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
5. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to qualified District, CARB or EPA personnel on request:
 - a. Date of each use or test;
 - b. Duration of each test, in minutes;
 - c. Total operating time each calendar year, in hours;
 - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.

[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

7. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
- (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.

[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

8. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
- (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.

[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]

9. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain

per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes. (Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)

[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

- J-67. MDAQMD Permit Number E008521:
IC ENGINE – EMERGENCY GENERATOR – Cummins diesel engine, model 6CT-8.3-G2, rated at 207 bhp.
- J-68. MDAQMD Permit Number E008555:
IC ENGINE – EMERGENCY GENERATOR – Cummins diesel engine, model 6CT-8.3-G2, rated at 207 bhp.

The following are conditions are applicable to MDAQMD Permit E008521, and E008555:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
2. This unit shall be limited to use when commercially available power has been interrupted, and as part of a testing program which does not exceed 60 minutes of operation per week.
3. The owner/operator (o/o) shall use only diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis in this unit. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
4. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to qualified District, CARB or EPA personnel on request:
 - a. Date of each use;
 - b. Duration of each use, in minutes;
 - c. Fuel consumed during each calendar year, in gallons;
 - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.
[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)
[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]
9. Owner/Operator shall not discharge into the atmosphere from this facility from the

burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.

(Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)

[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

- J-69. MDAQMD Permit Number M008656; STANDBY GENERATOR, IC ENGINE POWERED, Diesel Fueled, Cummins, Model 6CTA8.3-G2, Serial No 46140011, 6 cylinders rated at 252 BHP @ 1800 RPM
- J-70. MDAQMD Permit Number M008657; STANDBY GENERATOR, IC ENGINE POWERED, Diesel Fueled, Cummins, Model 6CTA8.3-G2, Serial No 46140021, 6 cylinders rated at 252 BHP @ 1800 RPM

The following are conditions are applicable to MDAQMD Permit M008656 and M008657:

- 1. This equipment shall be installed, operated and maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.
- 2. This unit shall be limited for use as back-up power; used exclusively to provide electrical power during maintenance or repair of an existing and permitted ICE powered generator.
- 3. The owner/operator (o/o) shall use only diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis in this unit. (Certification from the vendor that fuel is California certified diesel may be used to demonstrate compliance with this requirement.)
- 4. The o/o shall maintain a log for this unit, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to qualified District, CARB, or EPA personnel on request:
 - a. Permit number of device temporarily not in use for repair or maintenance;
 - b. Date(s) of usage of Stand-By unit;
 - c. Duration of use, in minutes, of Stand-By unit;
 - d. Annual operation in terms of total calendar year fuel use (in gallons) or hours, of

Stand-By unit;

e. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

5. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
[Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
6. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (d) Compliance with Rule 401 (Opacity) may be used as an indicator of compliance with Rule 404, unless MDAQMD requests source testing.[Rule 404 - *Particulate Matter Concentration*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) (Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.)[Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂) greater than or equal to 500 ppm by volume. (Compliance with Rule 431 (Sulfur Content of Fuels) may be used to demonstrate compliance with this requirement.)
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

9. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.
(Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

K. THIS SECTION COVERS TWO SOIL VAPOR EXTRACTION UNITS. EACH OF THESE UNITS IS LOCATED AT A FORMER GASOLINE STATION AS PART OF A CLEANUP EFFORT REQUIRED BY THE RESOURCES CONSERVATION AND RECOVERY ACT.

- K-1. MDAQMD Permit Number B003491:
SOIL REMEDIATION SYSTEM; Vacuum pump - By Sutorbilt 3LL blower w/7.5 bhp explosion proof motor.
Knockout Tank - By EVAX w/particulate filter, pressure relief valve, and explosion proof level switch.
Thermal Oxidizer - By EVAX with an operating temp of 1400 degrees F & a min. efficiency of 99%.
Catalytic Oxidizer - By EVAX w/platinum/palladium catalyst bed, an operating temp of 650 degrees F & a Min efficiency of 98.5%.
Burner - By Eclipse Combustion, Model 84 MVTA with a rating of one million Btu/hr and a turndown ratio of 25:1.
Heat Exchanger - By Exothermics-Eclipse, Inc.
Control Panel - NEMA 4X with 4-channel recorder, temperature controller, over - temperature controller, Eclipse burner management system, and lower explosive limit (LEL) indicator mfg by Control Instruments Corporation.

The following are conditions are applicable to MDAQMD Permit B003491:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. Propane shall be continuously co-fired in this equipment in order to optimize combustion of the extracted soil vapors.
3. Benzene concentration at the exit of the system must not exceed 0.01 ppm by volume as determined by method 410A of the California Air Resources Board.
4. A portable hydrocarbon analyzer (Foxboro OVA-FID, Horiba Mexa 324GE or equivalent) shall be used for the first 10 days and weekly thereafter to measure the total petroleum hydrocarbon (TPH) concentration in the inlet and outlet of this system. The hydrocarbon analyzer shall be calibrated in ppmv of hexane.
5. The TPH concentration measured at the inlet shall not exceed 30,000 ppm and at the outlet shall not exceed 100 ppm.
6. Temperature measuring devices shall be installed and maintained at the outlet of both the thermal and catalyst oxidizers.
7. Whenever the vapor extraction system is operating, the temperature shall be as follows:
 - A. At the outlet of the thermal oxidizer shall be 1400 degrees F or greater.
 - B. At the outlet of the catalyst oxidizer shall be 650 degrees F or greater.
8. A flow indicator and recorder must be installed and maintained at the inlet at the system to measure and record the total rate in standard cubic feet per minute (SCFM).
9. The flow rate measured at the inlet of the system shall not exceed 200 SCFM.
10. Within ninety (90) days of commencement of operation the owner/operator (o/o) shall conduct a compliance/certification test (source test) for benzene and total petroleum hydrocarbons as gasoline (TPHg) in accordance with the District "Compliance Test Procedural Manual".
 - A. At least thirty (30) days prior to the commencement of operation of this soil vapor extraction and treatment system the o/o shall submit to the District a written test plan for review and approval.
 - B. At least ten (10) days prior to the scheduled test date the o/o shall give written notice of the test date(s) to the District so that an observer may be present.
 - C. A written test report with the results of such test shall be submitted to the District within forty-five (45) days after completion of sample collections on-site.
11. The o/o shall notify the District Engineering Section in writing within 10 working days of

each of the following:

- A. Commencement of construction or installation.
- B. Completion of construction or installation.
- C. Commencement of operation.

- K-2. MDAQMD Permit Number B003657:
SOIL REMEDIATION SYSTEM; WEST OF BUILDING 11040, Paragon Environmental systems 250 SCFM Thermal/Catalytic oxidizer, propane fired with the necessary electrical, monitoring, sampling and controls to operate effectively and safely.

The following are conditions are applicable to MDAQMD Permit B003657:

- 1. Operation of this equipment shall be in strict compliance with all the information submitted with the application for this permit unless specifically exempted hereunder.
 - 2. The District shall be notified in writing and by telephone no less than 10 working days prior to operation of this equipment, to allow qualified District, CARB or EPA personnel an opportunity to observe.
 - 3. During these operations, determinations for TPH as hexane, or equivalent, shall be made using a flame ionization detector, FID, or photoionization detector (PID) or other method that this District determines equivalent.
 - 4. Emissions determinations shall be made by FID/PID hourly for 10 hours on each of the first two days of operation, then daily for the next five days of operation. Subsequent to the initial week, the monitoring may be reduced to monthly in conjunction with bag samples and analyses according to EPA Methods 8015 (modified) and 8020, until completion of the project.
 - 5. Emissions determinations by FID/PID shall be measured at the inlet to the combustor and its exhaust.
 - 6. FID/PID use shall be considered invalid if not calibrated daily.
- L. THIS SECTION COVERS FIVE PERMITTABLE SOLVENT CLEANING OPERATIONS.
Three units are large dip tanks that are used for soaking rocket motor cases and miscellaneous hardware to remove residual linings, carbon, propellants, and other

materials.

The remaining two units are cold parts washers used for the cleaning of various parts and materials.

The following Rule applies to below Section L listed equipment.

[Rule 1104 - *Organic Solvent Degreasing Operations*; Version in SIP = Current, 40 CFR 52.220(c)(207)(i)(D)(2) - 04/30/96 61 FR 18962, effective 11/30/94]

L-1. MDAQMD Permit Number T003150:

DIP TANK; at Salt Wells Area, Bldg 15956, a tank, whose surface area is 38 in by 98.5 in. The volume of the tank is 1170 gallons. It is used for soaking rocket motor cases and miscellaneous hardware to remove residual linings, carbon, propellants and other materials.

The following are conditions are applicable to MDAQMD Permit T003150

1. This tank shall be provided with a tight fitting cover, which shall be closed when the tank is not in use.
2. The solvent used in this tank is limited to Citrikleen or equivalent.
3. This tank shall have at least 5 in of freeboard after immersion of items to be cleaned.
4. Parts shall be added and removed in such a manner to preclude splashing and parts being removed shall be visually dry before removal.
5. The hoist speed of the removal/addition of parts shall be slow enough to prevent emissions of solvent vapors from the tank.
6. An operator log shall be maintained which contains as a minimum the following information: type of solvent used; dates and amounts of solvent added; all maintenance/repairs and a self-inspection checklist.
The log shall be maintained current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.

L-2. MDAQMD Permit Number T003151:

DIP TANK; at SALWELLS AREA, BUILDING 15956, an in-house fabrication. This tank holds 1170 gal and is 38 in by 98.5 in and 3 ft deep. It uses acetone (CAS 000 067 641) at ambient temperatures for the removal of residual linings, carbon and propellants from rocket motor cases.

- L-3. MDAQMD Permit Number T005062:
COLD PARTS WASHER; at CLPL/SWPL, BUILDING 15950, manufactured by R & D.
The dimensions are 45 in by 24 in by 17 in. It is used with acetone (CAS 000 067 641) as a solvent at ambient temperatures.

The following are conditions are applicable to MDAQMD Permits T003151, and T005062:

1. This tank shall be provided with a tight fitting cover, which shall be closed when the tank is not in use.
2. The solvent used in this tank is limited to acetone as described above.
3. This tank shall have at least 5 in of freeboard after immersion of items to be cleaned.
4. Parts shall be added and removed in such a manner to preclude splashing and parts being removed shall be visually dry before removal.
5. The hoist speed of the removal/addition of parts shall be slow enough to prevent emissions of solvent vapors from the tank.
6. An operator log shall be maintained which contains as a minimum the following information: type of solvent used; dates and amounts of solvent added; all maintenance/repairs and a self-inspection checklist.
The log shall be maintained current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.

- L-4. MDAQMD Permit Number T003152:
DIP TANK; at SALTWELLS AREA, BUILDING 15956, an in-house fabrication which holds 1170 gal. It is 38 in by 98.5 in and 3 ft deep. It uses Paint Thinner (CAS 64742-88-7) or equivalent boiling point solvent (321-373 degrees F) at ambient temperatures to remove residual linings, carbon and propellant from rocket motor cases.

- L-5. MDAQMD Permit Number T005063:
COLD PARTS WASHER; at CLPL/SWPL, BUILDING 15950, a unit fabricated by R & D MODEL E440. This unit is 45 in by 24 in by 17 in and holds approximately 80 gallons. Paint thinner (CAS 64742-88-7) or equivalent boiling point solvent (321-373 degrees F) is used at ambient temperatures.

The following are conditions are applicable to MDAQMD Permits T003152, and T005063:

1. This tank shall be provided with a tight fitting cover, which shall be closed when the tank is not in use.
2. The solvent used in this tank is limited to paint thinner or equivalent as described above.
3. This tank shall have at least 5 in of freeboard after immersion of items to be cleaned.
4. Parts shall be added and removed in such a manner to preclude splashing and parts being removed shall be visually dry before removal.
5. The hoist speed of the removal/addition of parts shall be slow enough to prevent emissions of solvent vapors from the tank.
6. An operator log shall be maintained which contains as a minimum the following information: type of solvent used; dates and amounts of solvent added; all maintenance/repairs and a self-inspection checklist.
The log shall be maintained current, on-site for a minimum of five (5) years and provided to qualified District, CARB or EPA personnel on request.

M. THIS SECTION COVERS WEAPON SURVIVABILITY TESTING OPERATIONS

The weapons survivability laboratory is a large outdoor test complex in which several types of tests are performed.

Aircraft live fire survivability or lethality tests are performed to determine the response of aircraft or other test items to simulated combat conditions. They may be conducted on an entire aircraft in combat configuration or any portion thereof.

Aerodynamic tests: in these tests, airflow is provided over the test item (e.g., a parachute, aircraft wing, weapon deployment, etc) to determine performance under simulated flight conditions. For certain test scenarios, an infrared source may also be used, such as an aircraft with engines running, a small rocket motor, an air breathing engine, or flares.

Cookoff tests: safety testing of ordnance under simulated emergency conditions.

Remote-controlled run-up and operation of aircraft, sea vehicles, land vehicles, and/or

missile engines.

For tests that require it, airflow is provided by routing the bypass air from one or more turbofan engine through ducting and to the test item. Two of the test sites include stationary high velocity air flow systems (HIVAS). The third (portable) HIVAS system can be used either at the K-2 test site or at any other location requiring airflow for a test.

Related activities such as painting operations, abrasive blasting operations, and use of internal combustion engines are discussed in other sections of this permit.

These gas turbines are exempt from the requirements of NSPS 40 CFR 60 subpart GG, NSPS for stationary gas turbines; all of the devices were constructed prior to 10/3/77.

M-1. MDAQMD Permit Number B003133:

TEST FACILITY (WEAPONS SURVIVABILITY RANGE MAIN), Six test pads. This facility includes the High Velocity Air Flow System (HIVAS), with four Pratt & Whitney TF-33 turbofan engines in a square cluster with their axes parallel and horizontal. HIVAS is located on a turntable allowing it to be used on any of four adjacent test pads, and was installed in 1974. This facility performs aircraft live fire survivability or lethality tests, aerodynamic tests, cookoff tests, and remote-controlled run-up and operation of aircraft, sea vehicle, land vehicle and/or missile engines.

The following are conditions are applicable to MDAQMD Permit B003133:

1. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with manufacturer's/supplier's recommendations and/or sound engineering principles.
2. No more than one test shall be permitted at this facility within an interval such that measurable emissions from one test are added to the emissions from other tests, or other activities emitting significant pollutants.
3. The following per test limits shall not be exceeded, unless previously approved in writing by the District:
 - a. HIVAS fuel per live fire test - 5,000 gallons
 - b. HIVAS fuel per aerodynamic test - 20,000 gallons
 - c. Fuel in test item per live fire or cookoff test – 2,000 gallons
 - d. Fuel in test item per aerodynamic test or run up – 4,000 gallons
 - e. Exterior fuel per cookoff test – 2,000 gallons
 - f. Explosives per live fire, aerodynamic or cookoff test - 50 lb
 - g. Propellant per live fire, aerodynamic or cookoff test - 50 lb

- h. Flares per live fire, aerodynamic or cookoff test - 50 lb
- 4. No more than 3000 lb of energetic material (propellant, explosives or pyrotechnics) shall be used for tests within any calendar day, unless previously approved in writing by the District.
- 5. No more than 50,000 gallons of fuel shall be used for all tests in the Weapons Survivability Lab complex within any calendar day, unless previously approved in writing by the District.
- 6. No more than forty-five (45) tests shall be conducted within any seven (7) calendar day period, unless previously approved in writing by the District.
- 7. The o/o shall maintain operational logs current and on-site for five (5) years. Such operational logs shall be provided to qualified District, CARB or EPA personnel upon request, and shall contain at least the following information:
 - (a) Type of test;
 - (b) Amounts (in gallons) and types of fuels used in each test, including amount used by HIVAS;
 - c. Amounts (in pounds) and types of energetic materials used in each test;
 - d. Date of each test;
 - e. Meteorological conditions for each test involving ordnance (maximum wind speed).
- 8. For tests involving the use of ordnance, the wind speed from any and all directions must be less than 25 knots.
- 9. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- 10. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400

Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL2)	450
Fluorine (F2)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

11. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

M-2. MDAQMD Permit Number B003277:

TEST FACILITY (WEAPONS SURVIVABILITY RANGE K-2). Five test pads. This range performs aircraft live fire survivability or lethality tests, cookoff tests, and remote-controlled run-up and operation of aircraft, sea vehicle, land vehicle and/or missile engines.

The following are conditions are applicable to MDAQMD Permit B003277:

1. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with manufacturer's/supplier's recommendations and/or sound engineering principles.
2. No more than one test shall be permitted at this facility within an interval such that measurable emissions from one test are added to the emissions from other tests, or other activities emitting significant pollutants.
3. The following per test limits shall not be exceeded, unless previously approved in writing by the District:
 - (a) Fuel in test item per live fire or cookoff test – 2,000 gallons
 - (b) Fuel in test item per run up – 4,000 gallons
 - (c) Exterior fuel per cookoff test – 2,000 gallons

- (d) Explosives per live fire or cookoff test - 50 lb
 - (e) Propellant per live fire or cookoff test - 50 lb
 - (f) Flares per live fire or cookoff test - 50 lb
4. No more than 3,000 lb of energetic material (propellant, explosives or pyrotechnics) shall be used for tests within any calendar day, unless previously approved in writing by the District.
 5. No more than 50,000 gallons of fuel shall be used for all tests in the Weapons Survivability Lab complex within any calendar day, unless previously approved in writing by the District.
 6. No more than forty-five (45) tests shall be conducted within any seven (7) calendar day period, unless previously approved in writing by the District.
 7. The o/o shall maintain operational logs current and on-site for five (5) years. Such operational logs shall be provided to qualified District, CARB or EPA personnel upon request, and shall contain at least the following information:
 - (a) Type of test;
 - (b) Amounts (in gallons) and types of fuels used in each test;
 - (c) Amounts (in pounds) and types of energetic materials used in each test;
 - (d) Date of each test.
 8. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
 9. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50

Chlorine (CL2) 450

Fluorine (F2) 50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

10. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.

[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]

[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR

52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

M-3. MDAQMD Permit Number B004011:

TURBINE, JP-8 (PORTABLE HIVAS). WEAPONS SURVIVABILITY LAB, a Pratt & Whitney TF30P-6E jet engine firing JP-8 fuel. This engine is platform mounted, designed to be moved as needed to locations where the necessary positional aspects and conditions relative to aerospace vehicle survivability testing. This engine uses a maximum of 6,200 lb fuel/h.

The following are conditions are applicable to MDAQMD Permit B004011:

1. This unit is limited to firing a total of 50 hours annually without the written prior approval of the APCO.
2. The following meteorological conditions shall be strictly adhered to for all testing in which this unit is operated:
 - a. The wind speed from any direction shall not exceed 25 mph.
3. The owner/operator (o/o) shall log and maintain the following information: date, time and duration of any test; unique test number; total gallons (or pounds) of fuel consumed; and meteorological conditions (see condition 2). This log shall be kept current, with the unit, and provided to qualified District, CARB or EPA personnel on request.

4. This equipment shall be operated and maintained in strict accord to those recommendations of the manufacturer/supplier and/or sound engineering principles.
5. This unit is restricted to using JP-8 fuel.
6. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
7. Owner/Operator shall not discharge into the atmosphere from this facility, solid particulate matter including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
 - (c) Compliance with Rule 401 (Opacity) may be used to demonstrate compliance with this requirement.
 [Rule 405 - *Solid Particulate Matter, Weight*; Version in SIP = Current, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489]
8. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR

52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

9. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum of 15 consecutive minutes.
 - (a) The provisions of this condition shall not apply to emissions from internal combustion engines.
[Rule 407 - *Liquid and Gaseous Air Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
 10. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes. (Compliance with Rule 401 (Opacity) and operation and maintenance in strict accord with recommendations of the manufacturer/supplier and/or sound engineering principles may be used to demonstrate compliance with this requirement.)
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]
Reference Section III A(1)
 11. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having a sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
[Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
- M-4. MDAQMD Permit Number B007890:
TEST FACILITY (WEAPONS SURVIVABILITY RANGE HIVAS2), Two test pads.
This facility includes the second High Velocity Air Flow System (HIVAS), with nine Pratt & Whitney TF-33 turbofan engines in a square cluster with their axes parallel and horizontal. HIVAS is located on a turntable allowing it to be used on any of two adjacent test pads. This facility performs aircraft live fire survivability or lethality tests, aerodynamic tests, cookoff tests, and remote-controlled run-up and operation of aircraft, sea vehicle, land vehicle and/or missile engines.

The following are conditions are applicable to MDAQMD Permit B007890:

1. The owner/operator (o/o) shall operate/maintain this equipment in strict accord with manufacturer's/supplier's recommendations and/or sound engineering principles.
2. No more than one test shall be permitted at this facility within an interval such that measurable emissions from one test are added to the emissions from other tests, or other activities emitting significant pollutants.
3. The following per test limits shall not be exceeded, unless previously approved in writing by the District:
 - a. HIVAS fuel per live fire test – 5,000 gallons
 - b. HIVAS fuel per aerodynamic test - 30,000 gallons
 - c. Fuel in test item per live fire or cookoff test – 2,000 gallons
 - d. Fuel in test item per aerodynamic test or run up – 4,000 gallons
 - e. Exterior fuel per cookoff test – 2,000 gallons
 - f. Explosives per live fire, aerodynamic or cookoff test - 50 lb
 - g. Propellant per live fire, aerodynamic or cookoff test - 50 lb
 - h. Flares per live fire, aerodynamic or cookoff test - 50 lb
4. No more than 3,000 lb of energetic material (propellant, explosives or pyrotechnics) shall be used for tests within any calendar day, unless previously approved in writing by the District.
5. No more than 50,000 gallons of fuel shall be used for all tests in the Weapons Survivability Lab complex within any calendar day, unless previously approved in writing by the District.
6. No more than forty-five (45) tests shall be conducted within any seven (7) calendar day period, unless previously approved in writing by the District.
7. The o/o shall maintain operational logs current and on-site for five (5) years. Such operational logs shall be provided to qualified District, CARB or EPA personnel upon request, and shall contain at least the following information:
 - a. Type of test;
 - b. Amounts (in gallons) and types of fuels used in each test, including amount used by HIVAS;
 - c. Amounts (in pounds) and types of energetic materials used in each test;
 - d. Date of each test;

- e. Meteorological conditions for each test involving ordnance (maximum wind speed).
8. For tests involving the use of ordnance, the wind speed from any and all directions must be less than 25 knots.
 9. Opacity not to exceed Ringelmann 1 for more than 3 minutes/hour.
 [Rule 401 - *Visible Emissions*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]
 10. Owner/Operator shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:
 - (a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂): 500 ppm by volume.
 - (b) The following elements and compounds, which would exist as liquid or gas at standard conditions:

<u>ELEMENT OR COMPOUND</u>	<u>LIMITATIONS (PPM BY VOLUME)</u>
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (CL ₂)	450
Fluorine (F ₂)	50

These concentrations are at ground level at the property line or boundary of the military installation. Compliance with this requirement may be demonstrated by compliance with operating limits in the PTO.

[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 - 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

11. Owner/Operator shall not burn any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight. Compliance with this condition may be demonstrated by purchase of only PUC quality natural gas or propane, or California certified diesel.
 [40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
 [Rule 431 - *Sulfur Content of Fuels*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 09/08/78 - 43 FR 40011; Current Rule Version = 07/25/77]

MDAQMD Federal Operating Permit
Naval Air Weapons Station, China Lake
Permit Number: 008800567

PART IV

STANDARD FEDERAL OPERATING PERMIT CONDITIONS

A. STANDARD CONDITIONS:

1. If any portion of this Federal Operating Permit is found to be invalid by the final decision of a court of competent jurisdiction the remaining portion(s) of this Federal Operating Permit shall not be affected thereby.
[40 CFR 70.6(a)(5); Rule 1203(D)(1)(f)(i)]
2. Owner/Operator shall comply with all condition(s) contained herein. Noncompliance with any condition(s) contained herein constitutes a violation of the Federal Clean Air Act and of MDAQMD Regulation XII and is grounds for enforcement action; termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal of this Federal Operating Permit.
[40 CFR 70.6(a)(6)(i); Rule 1203(D)(1)(f)(ii)]
3. It shall not be a defense in an enforcement action brought for violation(s) of condition(s) contained in this Federal Operating Permit that it would have been necessary to halt or reduce activity to maintain compliance with those condition(s).
[40 CFR 70.6(a)(6)(ii); Rule 1203(D)(1)(f)(iii)]
4. This Federal Operating Permit may be modified, revoked, reopened or terminated for cause.
[40 CFR 70.6(a)(6)(iii); Rule 1203(D)(1)(f)(iv)]
5. The filing of an application for modification; a request for revocation and re-issuance; a request for termination; notifications of planned changes; or anticipated noncompliance with condition(s) does not stay the operation of any condition contained in this Federal Operating Permit.
[40 CFR 70.6(a)(6)(iii); Rule 1203(D)(1)(f)(v)]
6. The issuance of this Federal Operating Permit does not convey any property rights of any sort nor does it convey any exclusive privilege.
[40 CFR 70.6(a)(6)(iv); Rule 1203(D)(1)(f)(vi)]
7. Owner/Operator shall furnish to the MDAQMD, within a reasonable time as specified by the MDAQMD, any information that the MDAQMD may request in writing to determine whether cause exists for modifying, revoking and reissuing, terminating, or determining compliance with the Federal Operating Permit.

[40 CFR 70.6(a)(6)(v); Rule 1203(D)(1)(f)(vii)]

8. Owner/Operator shall furnish to qualified District, CARB or EPA personnel, upon request, copies of any records required to be kept pursuant to condition(s) of this Federal Operating Permit.
[40 CFR 70.6(a)(6)(v); Rule 1203(D)(1)(f)(viii)]
9. Any records required to be generated and/or kept by any portion of this Federal Operating Permit shall be retained by the facility Owner/Operator for at least five (5) years from the date the records were created.
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
10. Owner/Operator shall pay all applicable fees as specified in MDAQMD Regulation III, including those fees related to permits as set forth in Rules 301 and 312.
[40 CFR 70.6(a)(7); Rule 1203(D)(1)(f)(ix)]
11. Owner/Operator shall not be required to revise this permit for approved economic incentives, marketable permits, emissions trading or other similar programs provided for in this permit.
[40 CFR 70.6(a)(8); Rule 1203(D)(1)(f)(x)]
12. Compliance with condition(s) contained in this Federal Operating Permit shall be deemed compliance with the Applicable Requirement underlying such condition(s). The District clarifies that “only” Applicable Requirements listed & identified elsewhere in this Title V Permit are covered by this Permit Shield and does not extend to any unlisted/unidentified conditions pursuant to the requirements of 40 CFR 70.6(f)(1)(i).
[40 CFR 70.6(f)(1)(i); Rule 1203(G)(1)]
13. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the emergency powers of USEPA as set forth in 42 U.S.C. §7603.
[40 CFR 70.6(f)(3)(i); Rule 1203(G)(3)(a)]
14. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit liability for violations, which occurred prior to the issuance of this Federal Operating Permit.
[40 CFR 70.6(f)(3)(ii); Rule 1203(G)(3)(b)]
15. This facility is not subject to any Applicable Requirement Contained in the Acid Rain Program.
[40 CFR 70.6(f)(3)(iii); Rule 1203(G)(3)(c)]

16. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the ability of USEPA or the MDAQMD to obtain information pursuant to other provisions of law including but not limited to 42 U.S.C. §7414. [40 CFR 70.6(f)(3)(iv); Rule 1203(G)(3)(d)]
17. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to emissions trading pursuant to provisions contained in an applicable State Implementation Plan. [40 CFR 70.4(b)(12)(ii)(B); Rule 1203(G)(3)(e)]
18. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to changes made which are not expressly allowed by this Federal Operating Permit. [40 CFR 70.4(b)(14)(iii); Rule 1203(G)(3)(f)]
19. The Permit Shield set forth in Part IV, condition 12, shall not be construed to apply to changes made pursuant to the Significant Permit Modification provisions until such changes are included in this Federal Operating Permit. [40 CFR 70.5(a)(1)(ii), 70.7(e)(2)(vi); Rule 1203 (G)(3)(g)]
20. If Owner/Operator performs maintenance on, or services, repairs, or disposes of appliances, Owner/Operator shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. These requirements are Federally Enforceable through this Title V Permit. [40 CFR Part 82, Subpart F]
21. If Owner/Operator performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), Owner/Operator shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. These requirements are Federally Enforceable through this Title V Permit. [40 CFR Part 82, Subpart B]
22. Notwithstanding the testing requirements contained elsewhere in this Title V Permit, any credible evidence may be used to establish violations, including but not limited to; reference test methods, engineering calculations, indirect estimates of emissions, CEMS data, and parametric monitoring data. Data need not be required to be collected in a Title V permit in order to be considered credible. [Section 113(a) of the Clean Air Act]

PART V OPERATIONAL FLEXIBILITY

A. OFF PERMIT CHANGES

I. Permittee may make a proposed change to equipment covered by this permit that is not expressly allowed or prohibited by this permit if:

A. Permittee has applied for and obtained all permits and approvals required by MDAQMD Regulation II and Regulation XII unless the equipment involved in the change is exempt from obtaining such permits and approvals pursuant to the provisions of Rule 219; and

1. The proposed change is not:

- a. Subject to any requirements under Title IV of the Federal Clean Air Act; or *[See 1203(E)(1)(c)(i)d.]*
- b. A modification under Title I of the Federal Clean Air Act; or
- c. A modification subject to Regulation XIII; and *[See 1203(E)(1)(c)(i) d.]*
- d. The change does not violate any Federal, State or Local requirement, including an applicable requirement; and *[See 1203(E)(1)(c)(i)c.]*
- e. The change does not result in the exceedance of the emissions allowable under this permit (whether expressed as an emissions rate or in terms of total emissions). *[See 1203(E)(1)(c)(i)e.]*

II. Procedure for “Off Permit” Changes

A. If a proposed “Off Permit Change” qualifies under Part V, Section (A)(I)(A)(1) above, permittee shall implement the change as follows:

1. Permittee shall apply for an Authority To Construct permit pursuant to the provisions of Regulation II. *[See 1203(E)(1)(c)(i)b.]*
2. In addition to the information required pursuant to the provisions of Regulation II and Regulation XIII such application shall include:
 - a. A notification that this application is also an application for an “Off Permit” Change pursuant to this condition; and *[See 1203(E)(1)(c)(i)b.]*
 - b. A list of any new Applicable Requirements which would apply as a result of the change; and *[See 1203(E)(1)(c)(i)b.]*
 - c. A list of any existing Applicable Requirements which would cease to apply as a result of the change. *[See 1203(E)(1)(c)(i)c.]*
3. Permittee shall forward a copy of the application and notification to USEPA upon submitting it to the District. *[See 1203(E)(1)(c)(i)a.]*

- B. Permittee may make the proposed change upon receipt from the District of the Authority to Construct Permit or thirty (30) days after forwarding the copy of the notice and application to USEPA whichever occurs later. *[See 1203(E)(1)(c)(i)a. and g.]*
 - C. Permittee shall attach a copy of the Authority to Construct Permit and any subsequent Permit to Operate which evidences the Off Permit Change to this Title V permit. *[See 1203(E)(1)(c)(i)f.]*
 - D. Permittee shall include each Off-Permit Change made during the term of the permit in any renewal application submitted pursuant to Rule 1202(B)(3)(b). *[See 1203(E)(1)(c)(i)f.]*
- III. Other Requirements:
- A. The provisions of Rule 1205 – Modifications do not apply to an Off Permit Change made pursuant to this condition.
 - B. The provisions of Rule 1203(G) – Permit Shield do not apply to an Off Permit Change made pursuant to this condition. *[See 40 CFR 70.4(b)(i)(B)]*
[Rule 1203(E)(1)(c)]

PART VI CONVENTIONS, ABBREVIATIONS, DEFINITIONS

A. The following referencing conventions are used in this Federal Operating Permit:

40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS)
40 CFR Part 60, Appendix F, Quality Assurance Procedures
40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants
(NESHAPS)
40 CFR Part 61, Subpart M, National Emission Standards for Asbestos
40 CFR Part 63--National Emission Standards For Hazardous Air Pollutants For
Affected Source Categories
40 CFR Part 72, Permits Regulation (Acid Rain Program)
40 CFR Part 73, Sulfur Dioxide Allowance System
40 CFR Part 75, Continuous Emission Monitoring
40 CFR Part 75, Subpart D, Missing Data Substitution Procedures
40 CFR Part 75, Appendix B, Quality Assurance and Quality Control Procedures
40 CFR Part 75, Appendix C, Missing Data Estimating Procedures
40 CFR Part 75, Appendix D, Optional SO₂ Emissions Data Protocol
40 CFR Part 75, Appendix F, Conversion Procedures
40 CFR Part 75, Appendix G, Determination of CO₂ Emissions

B. Other conventions:

1. Unless otherwise noted, a “day” shall be considered a 24-hour period from midnight to midnight (i.e., calendar day).
2. The process unit identifications represent the District permit number designations. These numbers are not sequential. The use of District permit numbers provides continuity between the District and Federal Operating Permit systems.

C. Abbreviations used in this permit are as follows:

acfm	Actual Cubic Feet per Minute
ACM	Asbestos Containing Materials
AFFF	Aqueous Film Forming Foam
APCO	Air Pollution Control Officer
ARB	Air Resources Board (California Air Resources Board)
ASTM	American Society for Testing and Materials
bhp	Brake Horse Power

Btu	British Thermal Units
CARB	California Air Resources Board
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CFM	Cubic Feet per Minute
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
°C	Degrees Celsius
deg C	Degrees Celsius
District	Mojave Desert Air Quality Management District (formed July 1993)
EPA	Environmental Protection Agency
Ex. Order	Executive Order
°F	Degrees Fahrenheit
ft	Feet
ft/min	Feet/Minute
FR	Federal Register
gal/min	Gallons per Minute
g/l	Grams per Liter
gr/L	Grains per Liter
HEPA	High Efficiency Particulate Arrestor
HIVAS	High Velocity Airflow System
HVLP	High Volume Low Pressure
hp	Horse Power
ICE	Internal Combustion Engine
in	Inch
Km	Kilometer
Kw	Kilowatt
lb	Pound
lb/gal	Pounds per gallon
lb/sec	Pounds per second
MCBAT	Modified Contained Burn Assessment Test
MDAQMD	Mojave Desert Air Quality Management District (formed July 1993)
MMBtu/hour	Million British Thermal Units per Hour
mm Hg	Millimeters of Mercury (Pressure)
mph	Miles Per Hour
PUC	Public Utility Commission
PM ₁₀	Particulate matter less than 10 microns aerodynamic diameter
ppmv	Parts per Million by Volume
psi	Pounds Per Square Inch
psia	Pounds Per Square Inch Absolute
psig	Pounds Per Square Inch Gage
R&D	Research and Development

rpm	Revolutions Per Minute
SCFM	Specific Cubic Feet per Minute
SIC	Standard Industrial Classification
SIP	State of California Implementation Plan
SO ₂	Sulfur Dioxide
TNT	Trinitrotoluene
μm	Micro (10E-6) Meter
USEPA	United States Environmental Protection Agency
USN	United States Navy
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compounds
WSL	Weapons Survivability Laboratory
EtOH/H ₂ O	Ethyl alcohol mixed with water